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VOLUME 52
1953

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THE JOURNAL
of the Michigan State Medical Society

VOLUME 52 JANUARY, 1953 NUMBER 1

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*Author unidentified. From Mencken, H. L.: A New Dictionary of Quotations. New York, Alfred A. Knopf, 1942, p. 1057.

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HIGHLIGHTS OF EXECUTIVE COMMITTEE OF THE COUNCIL

Meeting of November 12, 1952

Seventy-nine items were presented to the Executive Committee of The Council on November 12. Chief in importance were:

- **Bay City General Hospital Problem.**—Report was made on the first attempt in Michigan, if not in the United States, of osteopaths to gain entrance into an accredited registered city hospital. A proposed amendment to the Bay City charter would have permitted osteopaths 20 per cent of the beds in the municipal institution. This bid was roundly defeated, 3 to 1, by the informed voters of Bay City on November 4.

  A review of this experience was ordered made so that it will be available upon request to any component society where a similar problem may arise.

  A vote of thanks was extended to the people of Bay City and all others who helped to maintain the high standards of the Bay City General Hospital; they were congratulated on their wise decision and their effort during the campaign preceding the November 4 vote.
- **Simplified Insurance Reporting Forms.**—Referred to The Council by the 1952 House of Delegates. Dr. Foster presented a report on contacts he made with the American Medical Association on November 7, per instruction. The subject was referred to the AMA House of Delegates to see what can be done with national health and accident insurance companies and the forms already developed by the AMA, with the suggestion that a meeting with the representatives of the Health and Accident Underwriters Conference or the Bureau of Personal Accident Health Underwriters be arranged.
- **Financial reports** were presented, studied and approved. Bills Payable were presented and payment was authorized. The sum of $20,000. of the Beaumont Memorial Funds (which will not be used until erection of Beaumont Memorial on Mackinac Island) was ordered invested in U. S. Treasury Bonds 2 per cent due 6/15/52-54, upon recommendation of the Finance Committee chairman.
- **Committee Reports.**—The following were given consideration: (a) Iodized Salt Committee, meeting of October 28; (b) Rheumatic Fever Control Committee, October 29; (c) Medical Advisory Committee to Michigan Hospital Service, November 6; (d) Committee on Scientific Work, November 11.
- **Discussion of Matters with AMA Delegates.**—The joint meeting (preceding the Clinical Session of the AMA) with AMA Delegates from Michigan (seven) included discussion on: (a) Raiding of Nurses in civilian hospitals by certain government units; (b) Utilization of medical personnel, drafted for military service, for other purposes; (c) "Involuntary" association of doctors of medicine and osteopaths; (d) Layman on programs sponsored by the AMA; (e) Clinical Session of AMA in Detroit in 1957; (f) Need for screening all policy matters by an AMA House of Delegates Reference Committee; (g) Tennessee and Minnesota State Resolutions re Veterans Administration non-service connected disability care.
- **President R. J. Hubbell, M.D., presented three matters:** (a) Report on Michigan Welfare Conference which he attended November 12 as MSMS representative; and (b) Letter of endorsement of the Michigan Tuberculosis Association's Christmas Seal Sale, which letter was authorized by the Executive Committee of The Council; (c) Appointment of Councilor A. H. Miller, M.D., Gladstone, as official MSMS representative to the funeral of Max Reynolds of Marquette, long-time member of the Michigan Crippled Children Commission. Thanks were authorized to Dr. Miller for his kindness in attending the Reynolds' funeral.
- **Editor Wilfrid Haughey recommended an arrangement** with the State Bar of Michigan whereby three doctors of medicine and three lawyers would write six articles of mutual interest to M.D.'s and lawyers, all six to be published in the April numbers of JMSMS and of the *State Bar Journal.* This suggestion was approved by the Executive Committee of The Council; The Editor's suggestion that the Roster be printed separate from JMSMS in future, to eliminate tardy publication, was approved.

- **Council Chairman William Bromme, M.D., appointed** the personnel of the Study Committee on Basic Science Law and the personnel of the Beaumont Memorial Committees, which were approved by the Executive Committee of The Council.
- **The program of the County Secretaries Conference** of February 25 in Lansing was presented and approved.
- **The Secretary reported** that testimonial banquets would be held coincident with the 1953 Michigan Clinical Institute for E. A. Irvin, M.D., Detroit, President of the national Industrial Medical Association and for H. M. Nelson, M.D., Detroit, President of the American Cancer Society. Scrolls were authorized to be presented to Drs. Irvin and Nelson.
- **Invitations to MSMS** to become a member of the Advisory Committee to Michigan State Traffic Safety Federation and also to become member of National Society for Medical Research were accepted by the Executive Committee of The Council.
- **Public Meetings throughout the State,** to be organized by the Michigan State Medical Society, on a local basis (with the assistance of the officers of the county medical society and the local MSMS Councilor), were authorized. Talks are to be presented on a scientific and socio-economic basis (combined if possible) by the MSMS President and other top officers of MSMS and of the AMA.
- **S. E. Gould, M.D.,** Eloise, was appointed as MSMS representative to attend the Conference on Trichinosis, December 15-16 in Chicago at AMA headquarters.
- **Max R. Burnell, M.D.,** Detroit, was designated as official MSMS representative to attend the 13th Annual Congress on Industrial Health, Chicago, January 20-22, 1953, following invitation of AMA Council on Industrial Health.
- **Interim Report on Study of Health and Accident Insurance Programs.**—Chairman W. S. Jones, M.D., announced his Committee would hold a meeting jointly with the MSMS Finance Committee on January 29, 1953, in Detroit; meanwhile, studies were going ahead with the insurance brokers et al.
- **Matters of mutual interest** were presented by State Health Commissioner A. E. Heustis, M.D., and discussed.
- **The Public Relations Counsel** presented the program of the Public Relations Conference scheduled for Sunday, February 1, in Detroit; a report on the recent campaign for reapportionment of the Legislature; recommendations on national legislation.
- **The scientific Press Relations Committee for the 1953 Clinical Institute** was appointed as follows: C. L. Weston, M.D., Chairman, Owosso; A. B. Gwinn, M.D., Hastings; H. F. Dibble, M.D., Detroit; and Ralph A. Johnson, M.D., Detroit.
- **The scientific Press Relations Committee for the 1953 MSMS Annual Session** in Grand Rapids also was appointed as follows: C. A. Payne, M.D., Grand Rapids, Chairman; H. G. Benjamin, M.D., F. C. Brace, M.D., and P. W. Kniskern, M.D., all of Grand Rapids.

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1. *Undesignated* gifts may be made direct *to the American Medical Education Foundation,* 535 N. Dearborn St., Chicago. These gifts will be forwarded to the national fund for Medical Education and added to those contributions received from other sources than the medical profession. This total is distributed on a proportional basis to all participating medical schools. These funds can be used by the medical schools only to supplement their instructional and research programs and cannot be used for building or capital fund purposes.

2. Contributions may be made direct *to the American Medical Education Foundation* and *designated* for use by specific medical schools. These gifts also will be forwarded to the national fund for Medical Education and distributed to the specified college of medicine. As in number one above, these funds must be used to supplement the instructional and research programs of the college and cannot be utilized for building or capital fund purposes.

3. Contributions may be made direct *to any participating medical school.* The purpose for which the gift shall be used *may be designated by the donor,* such as for the instructional and research programs, medical or library equipment, or construction of buildings. Such

contributions will be reported by the medical school to the American Medical Education Foundation, which will, in turn, give appropriate recognition to the donors in its annual report. For example, an alumnus of the U. of M. Medical School may make a donation towards the construction of the projected new Medical Center in Ann Arbor. The ruling of the AMA on this subject reads, in part, as follows:

"To eliminate possible competition with the fund raising campaigns of individual schools, the Directors . . . voted that, effective January 1, 1952, the Foundation each year will give appropriate recognition in its annual report to those physicians whom the medical schools report to the Foundation as having supported medical education by making a gift directly to a medical school."

4. Contributions may be made direct *to any campaign fund* which is being raised with the approval of and in behalf of any participating medical school. These gifts will be reported to the dean of the medical school, who, in turn, will report them to the American Medical Education Foundation, which, as outlined in number three above, will give appropriate recognition to the donors in its annual report.

For example, an alumnus of the College of Medicine of Wayne University or any other donor who makes a donation to the Medical Library Fund for that institution will receive full credit through the process outlined above by the American Medical Foundation.

The AMA has urged all members of the medical profession to pledge $100 per year for ten years. The amount of the pledge does not qualify in any way the recognition given any gift by the American Medical Education Foundation.

The Journal of the Michigan State Medical Society already has published a list of the Michigan donors to the American Medical Education Foundation; also, a list of all donors to the Medical Library Fund of the College of Medicine of Wayne University, giving both the names of the Wayne alumni and the non-alumni contributors to the Fund. Subsequent lists will be published from time to time in The Journal.

NON-SERVICE CONNECTED DISABILITIES

At the December Clinical Session of the American Medical Association in Denver, the most controversial resolution introduced referred to veterans' medical care and hospitalization program. A report by a six-man committee, which urged Congress to curtail hospital services to veterans with non-service connected disabilities, was made after a year's careful study. The report indicated that more than a half-million veterans, with predominantly non-service connected diseases, were admitted to Veterans Administration hospitals during 1951 alone. The Committee felt that the hospital and medical care program for veterans had grown into a costly federal giant, with unwieldy power and contradictory authority. The report was sent to the Reference Committee on Insurance and Medical Service (of which R. L. Novy, M.D., Detroit, is a member).

The Reference Committee report, which supported much of the Committee's work, urged at the same time that more study be given to this complex problem. The heart of the Reference Committee report is contained in the following two paragraphs:

"The Reference committee believes that the recommendation of the special committee—that the provision of medical care and hospitalization in Veterans Administration hospitals for the remaining groups of veterans with non-service-connected disabilities be discontinued and that the responsibility for the care of such veterans revert to the individual and the community, where it rightfully belongs—cannot be accomplished without the cooperation of Congress, veterans organizations and the medical profession.

"The reference committee, after conducting exhaustive hearings, is of the opinion that the only honorable, equitable and reasonable way to approach the problem is to recommend to the House of Delegates that the American Medical Association, the veterans organizations, the American Dental Association, the American Hospital Association, and representatives of the Department of Defense and the Veterans Administration sit down and try to reach reasonable conclusions for appropriate action from agreed upon data rather than take any precipitate action now."

AMA DELEGATES' DUTIES NEVER END!

Caucuses and committee meetings! Sessions and reports!! To bed after late business meetings on Western Time—up for early caucuses on Michigan Time!!!

That was the Denver AMA Clinical Session as experienced by Michigan's Delegates and Alternate Delegates to the AMA House of Delegates.

The schedule began with a caucus, under the chairmanship of slave-driving Wm. A. Hyland, M.D., Grand Rapids, on Monday, December 1, at 4:30 p.m., just a few minutes after most of the delegates and alternates had arrived in Denver. The list of resolutions was studied, committee coverage and appointments were laid out. The next caucus was scheduled before the first caucus was adjourned! A sergeant-at-arms was appoint-

(Continued on Page 12)

- *For Anemias with or without Neurological Disorders . . .*
- *Nutritional Macrocytic Anemia . . .*
- *Megaloblastic Anemia of Infancy . . .*
- *Pernicious Anemia of Pregnancy . . .*
- *Refractory Megaloblastic Anemia . . .*

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AMA DELEGATES' DUTIES NEVER END!

(Continued from Page 10)

ed to "sound the clarion from the tower," in case any delegate or alternate had the mistaken notion or wilful desire to sleep after 7:00 a.m. W. W. Babcock, M.D., with his far-from-Eddie Guest talent, barked the following alleged rhyme over the telephone in the stillness of the dark, early morn:

"Bill Hyland says you must arise
blue
And open up your bright brown eyes.
green
Therefore awake, bathe and shave,
For you are but his willing slave.
7:30 a.m.—Independence Room.
Hurry up now—see you soon!"

That, in a basso profundo at 7:00 a.m. greeted each of the Michigan Delegates and Alternate Delegates via the telephone, including: W. A. Hyland, M.D., W. H. Huron, M.D., R. L. Novy, M.D., R. A. Johnson, M.D., J. S. DeTar, M.D., R. H. Denham, M.D., G. C. Penberthy, M.D. (representing the AMA Section on Surgery), C. I. Owen, M.D., E. D. Spalding, W. W. Babcock, M.D., E. C. Texter, M.D.

In all, five caucuses of the Michigan delegation were held during the four-day AMA meeting, three at 7:30 a.m.

Every important resolution presented to the AMA House of Delegates was thoroughly considered by the Michigan delegation. Each important reference committee was covered by a delegate or an alternate from the Wolverine State.

Michigan was honored by having two of its delegates on important reference committees: Wm. A. Hyland, M.D., was chairman of the Industrial Relations Committee; R. L. Novy, M.D., served as a member of the Reference Committee on Insurance and Medical Service.

Three resolutions were introduced by the Michigan delegation, one inviting the American Medical Association to hold its 1957 Clinical Session (in December) in Detroit.

All in all, this reporter found that the life of a delegate to the AMA (at least from Michigan) is that of a "grind." It's a tough four (in June, five) days' schedule of all work and mighty little play. It represents an annual contribution of at least two weeks' time away from one's practice, which is a rather significant contribution on the part of these Michigan men to the welfare of American Medicine and its 5,218 practitioners in Michigan.

Thank you, Delegates and Alternate Delegates to the AMA!

THE PEOPLE VOTED THREE TO ONE!

The Council of the Michigan State Medical Society recently congratulated the people of Bay City for their courageous action in voting overwhelmingly to maintain high standards of hospital care by defeating an osteopathic attempt to take over a portion of municipally owned Bay City General Hospital.

A proposed osteopathic amendment to the Bay City charter, which would have given 20 per cent of the beds in that hospital to the osteopaths, was rejected by the voters on November 4 by a vote of 14,526 to 5,633. The osteopathic-inspired amendment had caused a heated controversy in the city since it was placed on the ballot last summer.

The successful campaign against the amendment was waged by public-spirited citizens of Bay City. All available media—newspapers, radio, pamphlets and direct mail—in addition to other campaign techniques were utilized to bring the *FACTS* to the voters. With the correct background and information, the people voted against this destructive proposal, three to one!

ANNUAL COUNTY SECRETARIES CONFERENCE

Wednesday, February 25, 1953
Lobby Lounge, Porter Hotel, Lansing

Chairman: JOHN A. WHITE, M.D., Big Rapids

PROGRAM

Morning Session—10:00 A.M.

1. "The Ballot Battle to Save Bay City General Hospital" N. R. MOORE, M.D., Bay City
2. "How to Report Cases to Michigan Medical Service" R. L. NOVY, M.D., Detroit
   LOUIS H. FREYE, Detroit

Coffee Break—11:30 A.M.

3. "Exchange of Scientific Programs Between County Medical Societies" H. E. COPE, M.D., Lansing
4. "Model Constitution and By-Laws for County Medical Societies"
   J. JOSEPH HERBERT, LL.B., Manistique
5. "What About Basic Science Act?"
   E. A. OSIUS, M.D., Detroit
   "What About Medical Practice Act?"
   E. C. SWANSON, M.D., Vassar
6. "Techniques—New and Old"
   L. FERNALD FOSTER, M.D., Bay City

Afternoon Activities—1:00-3:00 P.M.

Inspection of the MSMS "home" at 606 Townsend, Lansing

Luncheon at Porter Hotel—1:30 P.M.

Luncheon Speaker
HON. WADE VAN VALKENBURG, Kalamazoo
Speaker, Michigan House of Representatives

Adjournment—3:00 P.M.

(Continued on Page 14)

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1. Perloff, W. M.: Am. J. Obst. & Gynec. *58*:684, 1949.

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ESTINYL

SCHERING

(Continued from Page 12)

EWING'S GOVERNMENT-FINANCED TRIP

A spokesman for Federal Security Administrator Oscar R. Ewing said today his government-financed trip around the world is an official business mission planned months ago.

He denied a charge by Republican Rep. H. R. Gross of Iowa that Ewing is treating himself to a final "lush travel orgy" before leaving office next January 20. Ewing left here Tuesday night on the first leg of his two-month trip, which will keep him out of the country until a few days before Eisenhower administration takes over. He planned to travel by commercial airliner via Europe to India, where he will attend two social workers' conferences next month.

He also intends to visit social welfare installations in other parts of the Far East and to return to the United States by flying over the Pacific to San Francisco.

Three of Ewing's aides plan to join him later at the India conferences. They also will travel by commercial airliner.

The Federal Security Agency declined to estimate how much the mission will cost the taxpayers. One official said, however, that the plane fare will be "less than $2,000" for each of the four persons. In addition, government employes on official trips are entitled to draw up to $9 per day for meals, hotel rooms and incidental expenses.

Gross appealed to President Truman yesterday to cancel the Ewing trip.

In a public letter to Mr. Truman, Gross said there is "little chance" of the public benefiting from the "junket" because Ewing will be out of office almost immediately after he returns.

The White House ignored Gross' letter.

About ninety Americans will attend two international conferences on social work and welfare in India during December. Among others making the trip will be Jane Hoey, director, Bureau of Public Assistance, FSA; Wilbur Cohen, technical adviser to Social Security Commissioner Arthur Altmeyer and Melvin A. Glasser, special assistant in Children's Bureau and president, International Federation of Social Workers.

* * *

U. S. HEALTH INSURANCE TO BE STUDIED

The Health Information Foundation plans to make a $275,000 study of the nation's voluntary health insurance plans.

The foundation's president, Adm. W. H. P. Blandy (Retired), said the study seeks "to determine the coverage and effectiveness of voluntary health insurance plans and indicate areas where extension of coverage and benefit provisions are required."

Blandy's announcement said the National Opinion Research Center of the University of Chicago has been commissioned to conduct part of the study and that the foundation staff is undertaking the rest of the work.

The foundation, which describes itself as a nonprofit and nonpolitical organization, is supported by the drug, pharmaceutical, chemical and allied industries.

—*Detroit Free Press,* Dec. 8, 1952.

MEDICAL MEETINGS AND CLINIC DAYS

A list of known medical meetings and clinic days, sponsored by county medical societies and other physicians' groups in Michigan, follows:

1953

Feb. 1 MSMS Public Relations Conference Sheraton-Cadillac Hotel, Detroit

Feb. 25 MSMS Annual County Secretaries' Conference Porter Hotel, Lansing

Mar. 10 MICHIGAN INDUSTRIAL HEALTH DAY Sheraton-Cadillac Hotel, Detroit

Mar. 11-13 MICHIGAN CLINICAL INSTITUTE Sheraton-Cadillac Hotel, Detroit

Mar. 13 Fourth MICHIGAN HEART DAY (part of MCI) Detroit

Spring MSMS Postgraduate Extramural Courses Statewide

April 8 Genesee County Medical Society Eighth Annual Cancer Day Flint

April Highland Park Physicians Club Clinic Highland Park

May 7 Ingham County Medical Society's Clinic Day Lansing

May 13 Wayne University Medical Alumni Clinic Day and Reunion Hotel Fort Shelby, Detroit

May 21 The American College of Surgeons Annual Symposium on Trauma and Nutrition Ann Arbor

June 1-5 AMA Annual Session New York

June 2 Annual Clinic Day, Bon Secours Hospital Detroit

June 19-20 Upper Peninsula Medical Society Annual Meeting Escanaba

July 30-31 Annual Coller-Penberthy Medical Surgical Conference Traverse City

August Third Annual Clinic, Central Michigan Committee, ACS Michigan Committee on Trauma, plus Michigan National Guard Medical Personnel, and Michigan Society of North Central Counties Grayling

Sept. 22 Michigan Chapter, American College of Surgeons Grand Rapids

Sept. 23-25 MSMS ANNUAL SESSION Grand Rapids

Oct. 21 Michigan Cancer Conference East Lansing

Autumn MSMS Postgraduate Extramural Courses Statewide

Additions to this list of meetings are invited by the Editor of JMSMS, in order to make this monthly announcement complete and accurate.

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1. Light up either one first. Take a puff—get a good mouthful of smoke—and s-l-o-w-l-y let the smoke come directly through your nose.
2. Now, do exactly the same thing with the other cigarette.

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SIXTH INTERIM SESSION

The sixth Interim Session of the American Medical Association was held in Denver, Colorado, on December 2, 3, 4, and 5, 1952. It was preceded by the PR Conference on Monday, December 1, at which several hundred were registered. There were several panel discussions. L. Fernald Foster, M.D., of Bay City, was scheduled to take part in one of these discussions, but could not attend, so Mr. Hugh Brenneman very ably substituted for him. More questions were directed to Mr. Brenneman than to any other panelist.

One of the features of the PR Conference was a skit put on by the Denver University Players, depicting two scenes, one the good and the other the bad public relations which can devolve from the daily conduct of a doctor's office. One picture showed the indifference and neglect of the various patients who came to the office—the hostess being more interested in a film star magazine and her dinner date than the convenience of the patients. The other showed the same persons in an entirely different mode of conduct of an office where the convenience and good feeling of the patient is foremost. The skit was interesting, and attracted much attention. Incidentally our Mr. Brenneman produced the same skit for us in Michigan several years ago, with Dr. S. DeTar of Milan playing the part of the doctor.

The House of Delegates met Tuesday, December 2, and received many resolutions, which were referred to appropriate committees for consideration, and report preceding adoption or rejection. William A. Hyland, M.D., of Michigan, was chairman of the Reference Committee on Industrial Health, and Robert L. Novy, M.D., also of Michigan, was on the Reference Committee on Insurance and Medical Service, probably the most active reference committee of the session.

One of the first orders of business was the announcement by the Board of Trustees that it had selected the General Practitioner of the Year for 1953, John Maston Travis, M.D., of Jacksonville, Texas. Dr. Travis is seventy-five years old and has practiced for forty-five years. He is also a charter member of the American Academy of General Practice.

The Board also reported the gift of a half million dollars to the American Medical Education Foundation. This now makes a million and a half, given by the AMA.

Besides the $1,500,000 given by the AMA to date, the foundation has received more than $585,000 from 6,600 individual donors. Receipts in the current year have totaled more than $840,000 from all sources.

Funds raised by the AMEF are transferred to the National Fund for Medical Education to be combined with contributions from corporations and others. In the last two years, a total of more than $3,100,000 has been raised by both groups.

The money is distributed as unrestricted grants to approved medical schools of the United States.

At eight P.M., Wednesday evening, December 3, a gold medal and a citation for service to humanity were conferred upon the new "General Practitioner of the Year," Dr. John Maston Travis of Jacksonville, Texas.

The special award program and the entertainment was planned by the Colorado State Medical Society for all physicians and others attending the AMA Sixth Annual Clinical Session.

Highlight of the evening was a performance by the famous Koshare Indian Dancers of La Junta, Colo. The Koshare Indian Dancers are a group of boys, primarily a scout troop, who in the past nineteen years have gained wide recognition for their interpretive Indian dances.

Music during the program was provided by Milton Shrednik's orchestra.

Thursday, December 4, was the day for reports of reference committees. Every resolution introduced was reported out by recommendation, was rewritten and reported or was consolidated with other reports when there were several on the same general topic, as happened. One of the most controversial was the question of veteran's medical care and hospitalization.

The matter was first brought to the floor of the House on the opening day, Tuesday, in the form of a report by a six-man committee, which urged Congress to curtail hospital services to veterans with non-service-connected disabilities. The report, made after a year's careful study, said that more

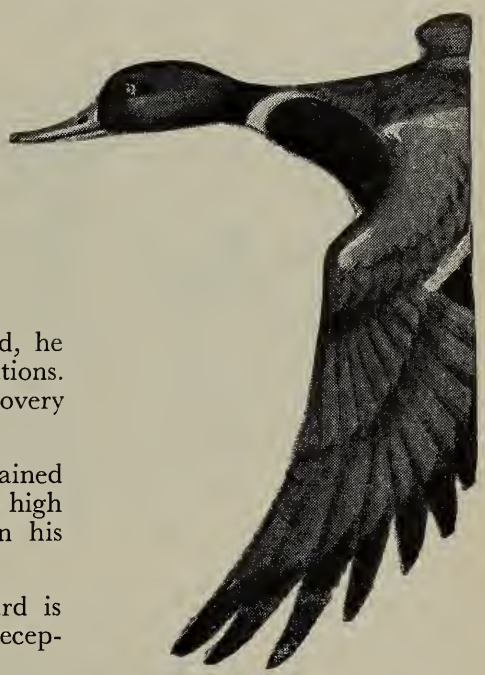
(Continued on Page 18)





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SIXTH INTERIM SESSION

(Continued from Page 16)

than a half-million veterans, with predominantly non-service-connected diseases, were admitted to Veterans Administration hospitals during 1951 alone. The committee felt that the hospital and medical care program for veterans had grown into a costly federal giant, with unwieldly power and contradictory authority.

The report and several resolutions on the subject went to the Reference Committee on Insurance and Medical Service, made up of Drs. Carlton E. Wertz, Buffalo, chairman; Harlan A. English, Danville, Ill.; William L. Estes, Bethlehem, Pa.; H. Gordon MacLean, Oakland, Calif.; and Robert L. Novy, Detroit.

Dr. Wertz read the reference committee report. There was considerable discussion. One amendment was offered. Eventually the House adopted the reference committee report, which supported much of the committee's work, but urged at the same time that more study be given to this complex problem.

The heart of the reference committee report was contained in the following two paragraphs:

"The reference committee believes that the recommendation of the special committee . . . that the provision of medical care and hospitalization in Veterans Administration hospitals for the remaining groups of veterans with non-service-connected disabilities be discontinued and that the responsibility for the care of such veterans revert to the individual and the community, where it rightfully belongs cannot be accomplished without the co-operation of Congress, veterans organizations and the medical profession.

"The reference committee after conducting exhaustive hearings, is of the opinion that the only honorable, equitable and reasonable way to approach the problem is to recommend to the House of Delegates that the American Medical Association, the veterans organizations, the American Dental Association, the American Hospital Association, and representatives of the Department of Defense and the Veterans Administration sit down and try to reach reasonable conclusions for appropriate action from agreed upon data rather than take any precipitate action now."

Another most important and controversial subject was the Doctor Draft Law. The AMA Council on National Emergency Medical Service recommended to the House that it withhold action on the Law, which expiries on July 1. More specific data and satisfactory answers to important questions are needed before action can be taken, and the House agreed.

The Scientific Program, which extended over four days, was directed primarily to the General Practitioner and was of the usual excellent quality. Included was one Michigan essayist, R. E. L. Berry, M.D., of Ann Arbor, whose subject was "The management of Acute Surgical Dehydration."

The total Denver registration was 6,733, including 2,614 physicians, while last year's meeting in Los Angeles drew a total registration of 9,075, including 4,419 physicians.

MORE BOOKINGS SEEN FOR "YOUR DOCTOR" FILM

More and more Americans will have an opportunity to see the RKO-Pathe film, "Your Doctor," during 1953. An estimated 12 million persons viewed the fifteen-minute movie-short in more than 2,000 commercial theaters across the nation in 1952.

After January 1, 16 mm. prints of the film will be available for showings to schools, service clubs, civic groups, industrial plants and special professional meetings. Produced by Louis de Rochemont in co-operation with the AMA, this film portrays the work of 35-year-old Dr. George Bond in his valley clinic in backwoods North Carolina.

The American Medical Association also has made arangements to obtain prints for state and county society film libraries. Societies interested in purchasing a print at cost may write to the AMA Public Relations Department. Details on distribution methods will be made available later.

TOP SPEAKERS BILLED ON RURAL HEALTH PROGRAM

Here's a brief glance at the "theater marquee" for the Rural Health Conference February 27-28 at the Roanoke Hotel, Roanoke, Virginia.

Principal "stars" include: Friday morning—*Dr. F. S. Crockett,* chairman of the AMA's Council on Rural Health, reviewing the last seven years in "Looking Back to Look Ahead." Friday afternoon . . . *Dr. Carll S. Mundy,* vice chairman of the Council, explaining various phases of financing rural medical care . . . *Frank Peck,* managing

(Continued on Page 20)

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TOP SPEAKERS BILLED ON RURAL HEALTH PROGRAM

(Continued from Page 18)

director, Farm Foundations, Chicago, "The Missing Item in the Family Budget" . . . *Eugene Butler,* editor, *Progressive Farmer,* Dallas, "Problems of Medical Care in the South."

Saturday morning, a series of success and accomplishment stories—*Miss Lilyan Zindell,* administrator of Perry County Memorial Hospital, Perryville, Missouri, will tell how a community planned and constructed a community hospital . . . *Dr. Edmund Yantes,* Wilmington, Ohio, will give a follow-up on the Clinton County Survey on over-all health problems in that area . . . *Dr. B. N. Salzman,* Mountain Home, Arkansas, will present a new general practitioner's viewpoint on facing problems in a rural community . . . *Dr. Felix Underwood,* director, Mississippi State Department of Health, will discuss medical scholarships.

Winding up the conference at Saturday's luncheon, *Dr. Louis H. Bauer,* AMA president, will tell "What Medicine Is Doing"—pointing out the Association's many services to its physician-members and the general public.

DOCTOR BAUER WRITES HEALTH COLUMN

"Health for Today," an authoritative health column by Dr. W. W. Bauer, director of the AMA's Bureau of Health Education, will be syndicated six days a week from coast-to-coast through King Features Syndicate. The first article will appear January 5, 1953. In his column, Dr. Bauer will discuss mainly health subjects rather than disease. He has received authorization from the Board of Trustees.

BIGGEST AMA MEETING ON RECORD PLANNED

Hardly is the debris swept away from one AMA meeting when it's time to plan another . . . especially, when the next annual meeting of the Association is expected to top all previous records—including the total attendance of 15,667 physicians made at the centennial session of 1947 at Atlantic City.

As early as last spring, AMA headquarters staff men settled preliminary arrangements with contractors, truckers, decorators and convention hall officials for the June meeting to be held in New York City.

During the first part of January, more than 5,280 square feet of exhibit space will be sold to approximately 350 commercial firms. Space has been allotted on the first three floors for the Technical Exposition and on the fourth floor for the Scientific Exhibit.

More than 12,000 hotel rooms in New York have been pledged for the convention. Physicians planning to attend the meeting may make their reservations as soon as the hotel advertisement appears in *The Journal of the AMA.*

NEW FILM CATALOG

A revised list of medical and health films has been prepared by the AMA's Committee on Medical Motion Pictures. Brief descriptions, running time, and rules and regulations are included in the catalog for 78 medical films which are available from the Committee. Copies of the list may be obtained from the Committee.

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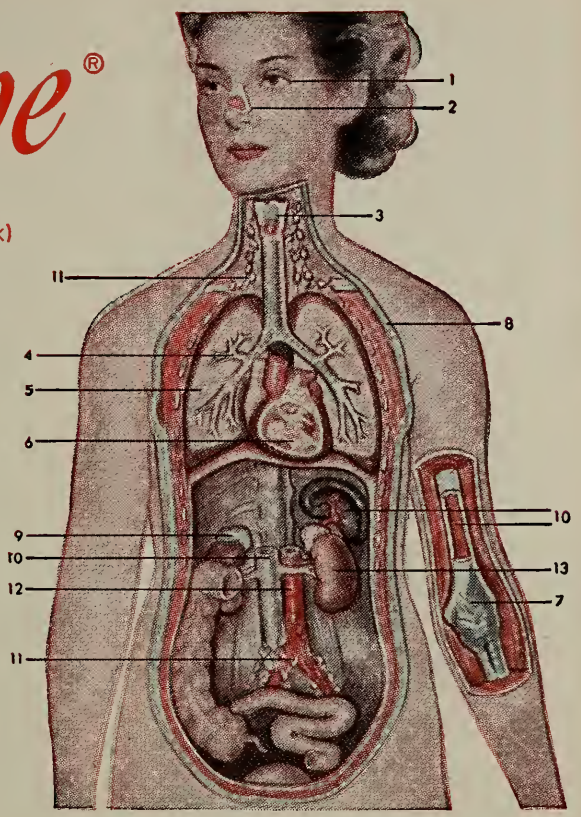
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1951

June 27	Arch Walls, M.D., Detroit	Family Doctor
July 4	R. J. Mason, M.D., Birmingham	Polio
July 14	L. A. Pratt, M.D., Detroit	Medical Associates
July 18	J. E. Croushore, M.D., Detroit	Tonsils
July 25	Frank Van Schoick, M.D., Jackson	Rheumatic Heart
August 1	O. C. Foster, M.D., Detroit	Pre-Natal and Post-Natal Care
August 8	O. D. Stryker, M.D., Mt. Clemens	Infectious Diarrhea
August 15	E. G. Merritt, M.D., Detroit	Home Nursing Programs
August 22	A. H. Whittaker, M.D., Detroit	Industrial Health
August 29	J. C. Montgomery, M.D., Detroit	Pre-School Clinics
September 5	J. I. Hauser, M.D., Detroit	Colds and Antihistamines
September 12	G. C. Thosteson, M.D., Detroit	Diabetes
September 19	Carleton Dean, M.D., Lansing	Crippled Children
September 26	Harold Henderson, M.D., Detroit	Fears of Pregnancy
October 3	A. T. MacGregor, M.D., Brighton	Value of Small Hospitals
October 10	J. J. Lightbody, M.D., Detroit	New Arthritis Theories
October 17	W. B. Cooksey, M.D., Detroit F. D. Johnston, M.D., Ann Arbor	Cardiac Catheterization and Surgery
October 24	Jack Rom, M.D., Detroit	Allergies
October 31	R. W. Waggoner, M.D., Ann Arbor	Emotional Factors and Diseases
November 7	J. S. DeTar, M.D., Milan	Michigan Rural Health Council
November 14	A. W. Strom, M.D., Hillsdale	Hillsdale Cancer Detection Plan
November 21	B. E. Brush, M.D., Detroit	Goiter and Iodized Salt
November 26	Gordon H. Scott, Ph.D., Wayne Univ., Detroit O. O. Beck, M.D., Birmingham	Funds for Wayne University
December 5	W. S. Reveno, M.D., Detroit	Modern Preventive Medicine
December 12	F. A. Weiser, M.D., Detroit	Problems in Living Longer
December 19	H. B. Zemmer, M.D., Detroit	Rural Medical Service and Health
December 26	E. J. Hill, Jr., M.D., Detroit	Plastic Surgery

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January 2	J. G. Molner, M.D., Detroit	Health in Detroit
January 9	E. D. Spalding, M.D., Detroit	Diet
January 16	A. E. Schiller, M.D., Detroit	Skin Diseases
January 21	L W. Hull, M.D., Detroit	Urology
February 4	F. J. Fischer, M.D., Detroit	Care of the Feet
February 11	H. B. Fenech, M.D., Detroit	Surgical Rehabilitation
February 18	O. K. Engelke, M.D., Ann Arbor	Public Health and Preventive Medicine
February 25	F. D. Johnston, M.D., Ann Arbor C. R. Lam, M.D., Detroit R. F. Ziegler, M.D., Detroit	Heart Research in Michigan
March 3	H. W. Woughter, M.D., Flint	Veteran Amputees
March 10	R. H. Pino, M.D., Detroit	Doctors and Insurance Health Plans
March 17	J. L. Kubanek, M.D., Dearborn	Nervous Breakdowns
March 24	J. E. Livesay, M.D., Flint	Radiology
March 31	H. A. Price, M.D., Detroit	Underweight Patient
April 7	Carleton Dean, M.D., Lansing	Crippled Children's Commission
April 14	C. E. Umphrey, M.D., Detroit	Tumors
April 21	F. E. Ludwig, M.D., Port Huron	Mental Health of Youngsters
April 30	E. C. Long, M.D., Monroe	Appendix
May 7	H. L. Weston, M.D., Detroit	Care of the Eyes
May 14	L. G. Waggoner, M.D., Detroit	Bronchoscopy
May 21	J. E. Livesay, M.D., Flint A. L. Tuuri, M.D., Flint	Mott Foundation
May 28	E. A. Osius, M.D., Detroit	Hernia
June 4	D. H. Kaump, M.D., Detroit	What You Should Know About Your Blood
June 11	B. M. Harris, M.D., Ypsilanti Mr. Daniel E. Ford, Detroit	Gall Bladder
June 18	J. L. Posch, M.D., Detroit	Normal Hands
June 25	O. B. McGillicuddy, M.D., Lansing	Care of the Ears
July 2	R. J. Mason, M.D., Birmingham	Pediatrics
July 16	G. C. Penberthy, M.D., Detroit	First Aid
July 23	I. J. Hauser, M.D., Detroit	Smoking
July 30	D. B. Wiley, M.D., Utica	Safety in Childbirth

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August 6	L. Dell Henry, M.D., Ann Arbor	Care of Ears and Nose in Children
August 13	G. V. Conover, M.D., Flint	Cataract
August 20	H. M. Bishop, M.D., Saginaw	Liver
August 27	Henry Turkel, M.D., Detroit	Biopsy
September 1	FILM SHOWN	Lucky Junior
September 8	G. E. Millard, M.D., Detroit	Peptic Ulcer
September 15	C. A. Ludwig, M.D., Port Huron	Advancement of Medicine
September 22	J. R. Rodger, M.D., Bellaire	MSMS Annual Session
September 29	C. P. Mehas, M.D., Pontiac	Alcoholism
October 6	A. E. Palmer, M.D., Detroit	Care of the Skin
October 13	G. T. McKean, M.D., Detroit	Tuberculosis
October 20	Louis Jaffe, M.D., Detroit	Civil Defense Medicine
October 27	Arch Walls, M.D., Detroit	Do's and Dont's for Colds
November 3	R. J. Elvidge, M.D., Detroit	Gastro Disturbances of Alimentary Canal
November 10	J. B. Blodgett, M.D., Detroit	Heart Surgery
November 17	W. M. LeFevre, M.D., Muskegon	Detection of the Diabetic
November 24	Howard Lewis, Ph.D., Ann Arbor	Amino Acids
December 1	George J. Curry, M.D., Flint	Trauma
December 8	Joseph A. Witter, M.D., Detroit	High Blood Pressure
December 15	Ralph A. Johnson, M.D., Detroit	Old Age Diseases
December 29	W. B. Harm, M.D., Detroit	Holiday Medicine

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January 5	Ivan C. Berlien, M.D., Detroit	Psychiatry in Modern Medicine
January 12	W. H. Gordon, M.D., Detroit	Your Doctor in War

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*Howorth, M. Beckett, p. 324, "A Textbook of Orthopedics," W. B. Saunders, 1952.

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Cancer Comment

A 100 PER CENT FOLLOW-UP RECORD OF CANCER PATIENTS

Approximately 13 per cent of all malignant neoplasms seen in the University Hospital, Ann Arbor, are in the gynecological field of clinical practice. Since July 1, 1931, this department has maintained a 100 per cent follow-up on all cancer cases coming within its service. This is a record unique and unparalleled in this or any other country.

Other reports have been made on complete follow-up on selected groups of cases, usually comparatively few in number and for a five-year period. As of December 31, 1950, the University Hospital record comprised 2,988 cases of cancer of the female genitalia, of which 1,999 were of the cervix, 428 of the endometrium, and the remainder, 561 cases, in other parts of the genital tract.

Methods required to meet this enviable goal have required endless perseverance on the part of Norman F. Miller, M.D., head of the department, and his staff as well as the co-operation of many other hospital departments, of which the departments of Pathology, Irradiation Therapy and Social Service were particularly helpful. Securing the necessary data required much correspondence, many telephone inquiries, personal interviews and searching of death records in various health department archives.

Certain phases of this nineteen-year study merit some discussion. Since the great majority of these 2,988 patients have been referred by physicians from various parts of Michigan, the anatomic distribution of their malignancies varies somewhat from the normal incidence of cancer in the female reproductive organs. Less than 8 per cent of the cases were of ovarian origin, compared to the usual incidence of 15 per cent to 20 per cent. Approximately two-thirds of the cases were of the cervix which emphasizes the great preponderance of cases of cancer seen in this tissue in comparison with other female genital tissues.

The following table of distribution of cancer cases is taken from the Nineteenth Annual Gynecology Tumor Conference Report, 1931-1950, published in the University of Michigan Medical Bulletin, October, 1951.

DISTRIBUTION OF 2,988 MALIGNANCIES OF THE FEMALE GENITAL TRACT STUDIED BY THE GYNECOLOGY TUMOR CONFERENCE
(July 1, 1931, to December 31, 1950)

Diagnosis	Number of Neoplasms	Percentage of all Neoplasms Seen
Carcinoma of Cervix Uteri	1,999	66.9
Carcinoma of Endometrium	428	14.3
Carcinoma of Uterus (Site of Origin Unknown)	7	0.2
Carcinoma of Ovary	230	7.7
Carcinoma of Vagina	55	1.8
Carcinoma of Vulva	117	3.9
Carcinoma of Clitoris	20	0.7
Carcinoma of Fallopian Tube	3	0.1
Carcinoma of Bartholin Gland	2	0.1
Sarcoma of Uterus (Cervix or Corpus)	36	1.2
Carcinoma and Sarcoma of Body of Uterus	4	0.1
Chorioepithelioma	15	0.5
Pelvic Malignancy, Unclassified	68	2.3
Sarcoma of Vagina	4	0.1
Total	2,988	

Over the years, the treatment of cancer of the cervix has been largely by irradiation. Recently, selected cases have had surgical therapy but no conclusions are advanced on this treatment because of the small number of cases.

The five-year absolute survival rate for all cervical cancers has increased from 38.7 per cent for 1931 cases, to 47.2 per cent for 1945 cases. The fact that well over half of all cancers of the cervix included in this nineteen-year report are in Grades III and IV, or advanced stage, emphasizes anew the need for a greatly intensified lay educational campaign to bring these patients to their physicians in much earlier stages of their disease.

The question of the value of continuing follow-up studies of this kind after a period of 10 to 15 years often has been raised. The likelihood of death from advancing age or other causes reduces the number of survivors to a point where percentages are easily distorted. However the reports under discussion emphasize the point that persistence of effort and the utilization of all means can bring the desired results. In too many cases, such efforts begun with the best of intention fail because of discouragements encountered as the time lengthens into decades and longer. It is fortunate, indeed, that Dr. Miller has chosen to continue this study in spite of all discouragements that must be met to keep the record accurate and complete. The report for the Twentieth Year, 1931-1951, is in preparation and will soon be issued.

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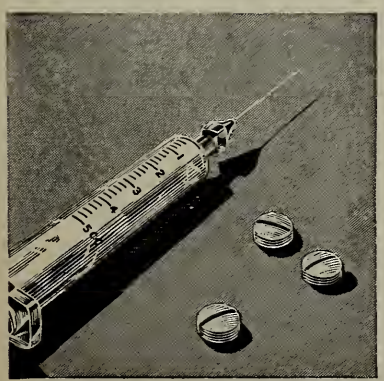
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Wayne Medical Alumni Reach Half Way Mark!

Below are two analyses of the $200,000 campaign for a Medical Library Fund being carried on by the Alumni Association of the Wayne University College of Medicine. To date, 702 pledges have been received for a total of $95,286.00.

The alumni practicing in the state were approached through Regional Chairmen, following more or less County Societies' boundaries. As the primary objective of both the AMEF and the Wayne alumni is to have every doctor of medicine contribute annually to medical education according to his means, the Regions have been listed according to the percentage of doctors subscribing. Alpena leads with 100 per cent.

Another approach was through Class Chairmen. Their reports have been listed in a comparable way.

(Continued on Page 28)

ANALYSIS OF TOTAL AMOUNT REPORTED TO DATE BY CLASSES
December 1, 1952

Class	Chairman	No. in Class	Number Pledged	Percentage Pledged	Total Amount
1928 (9)	Lee Hileman, M.D.	30	21	70%	$ 3,285.00
1924 (7)	Perry P. Burnstine, M.D.	20	11	55%	3,575.00
1925 (6)	Thaddeus Stokfisz, M.D.	24	13	54%	3,675.00
1908	J. Milton Robb, M.D.	15	8	53%	1,325.00
1936 (4)	Elwood Jenkins, M.D.	66	32	49%	4,100.00
1929 (3)	Harry Carl Wissman, M.D.	46	21	46%	4,220.00
1935 (1)	W. Kenneth Tregenza, M.D.	71	31	44%	6,660.00
1920 (2)	Clarence I. Owen, M.D.	34	15	44%	4,770.00
1943-M. (8)	Alexander Blain, III, M.D.	66	29	44%	3,510.00
1930	Marion Jocz, M.D.	37	16	43%	2,885.00
1939 (5)	Sidney Friedlaender, M.D.	71	30	42%	3,985.00
1919 (10)	Hellmuth A. Meinecke, M.D.	24	10	42%	2,945.00
1927	A. E. Vossler, M.D.	31	13	42%	2,090.00
1931	J. Tapert, M.D.	48	19	40%	2,405.00
1941	Benjamin Jeffries, M.D.	58	24	40%	2,390.00
1933	D. A. Cameron, M.D.	58	23	40%	1,910.00
1942	George H. Andries, M.D.	52	17	35%	1,760.00
1934	Ben Juliar, M.D.	61	21	34%	2,135.00
1902	William E. Keane, M.D.	18	6	33%	755,00
1918	Ray S. Dixon, M.D.	15	5	33%	115.00
1943-D.	Howard A. Klein, M.D.	56	18	32%	1,745.00
1881-thru 1900	Committee of Five: Clark D. Brooks, M.D., '05; H. W. Cadieux, M.D., '96; W. D. Ford, M.D., '99; Louis J. Hirschman, M.D., '99; J. Milton Robb, M.D., '08	82	24	29%	2,271.00
1937	Milton Jerome Rueger, M.D.	80	23	29%	2,240.00
1938	F. C. Jewell, Jr., M.D.	73	21	29%	1,450.00
1921	V. N. Butler, M.D.	41	12	29%	1,100.00
1915	F. W. Gottschalk, M.D.	29	8	28%	385.00
1932	Paul L. Cusick, M.D.	64	17	27%	1,715.00
1926	Stanley C. Fenton, M.D.	44	12	27%	805.00
1917	Hartman A. Lichtwardt, M.D.	47	12	26%	1,510.00
1943-J.	Ronald E. Clark, M.D.	65	16	25%	2,050.00
1904	C. Bradford Lundy, M.D.	20	5	25%	150.00
1901	Allen McDonald, M.D.	8	2	25%	25.00
1916	Don A. Cohoe, M.D.	33	8	24%	2,315.00
1914	A. E. Schiller, M.D.	33	8	24%	2,175.00
1905	Henry A. Luce, M.D.	17	4	24%	900.00
1906	Alexander W. Blain, M.D.	17	4	24%	825.00
1912	Clarence Candler, M.D.	25	6	24%	500.00
1922	Ruth Wagner, M.D.	18	4	22%	325.00
1910	Rene J. St. Louis, M.D.	19	4	20%	1,150.00
1911	Harry Dibble, M.D.	20	4	20%	260.00
1944	Stella M. Delaini, M.D.	68	13	19%	1,312.00
1940	John M. Pendy, M.D.	59	11	19%	1,225.00
1909	Euclid Joinville, M.D.	16	3	19%	900.00
1903	C. E. Simpson, M.D.	12	2	17%	110.00
1951	R. V. Walker, Jr., M.D.	62	10	16%	54.00
1948	William Frank Trinkaus, M.D.	54	8	15%	465.00
1907	Ray C. Andries, M.D.	26	4	15%	270.00
1913	Robert C. Moehlig, M.D.	7	1	14%	200.00
1947	Hugh W. Henderson, M.D.	62	8	13%	440.00
1945	Francis Martin, M.D.	68	7	10%	510.00
1950	Murray W. Hess, M.D.	58	6	10%	485.00
1946	Richard C. Sargent, M.D.	53	5	9%	355.00
1949	Armon Shekerjian, M.D.	36	3	9%	50.00
	Special		44		6,519.00
	Totals	2,217	702	32%	$95,286.00

In addition, members of the classes of 1951 and 1952 have pledged $1,000 each, payable starting ten years after graduation, for a total of $95,000.00.



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right through the menopause

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YOUR prudent and assuring explanations will help—clearing away the jungle of her doubts and fears. Then SULESTREX will help—in controlling the physical symptoms of the climacteric.

Years of search have given you SULESTREX—an odorless, absolutely pure, crystalline estrogen, chemically standardized for unvarying hormonal activity. Unexcelled—therapeutically *and* esthetically—these tiny uncoated tablets will never insult the breath or perspiration, never annoy with "after-taste."

A new report by Reich and associates[1] confirms and extends his conclusions from his pilot study[2]...

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1. Reich, W. J., et al. (1952), A Recent Advance in Estrogen Therapy. II. Amer. J. Obst. & Gynec., 64:174, July. 2. Reich, W. J., et al. (1951), A Recent Advance in Estrogen Therapy. I. Amer. J. Obst. & Gynec., 62:427, August.

1-81

(Continued from Page 26)

The ten leading Regions and Classes pledging the highest amounts have numbers in front of the Chairmen's names.

Contributions have ranged from $1 to $2,000. The present students each have given $1 to show their goodwill. Many of the interns have pledged at a rate of $10, while the more prosperous doctors have pledged $300 or more, with payments on an annual basis. Twenty-one have pledged $1,000, payable over a ten-year period.

The contributions are tax deductible, and the AMEF is giving full credit to each individual doctor in its annual report.

ANALYSIS OF AMOUNT REPORTED TO DATE BY REGIONS
December 1, 1952

Region		Chairman	No. in Region	Number Pledged	Percentage Pledged	Total Amount
Alpena-Alcona-Presque Isle		Joe A. Ramsey, M.D., '36	5	5	100%	$ 450.00
Wayne-Northville		Wilbur J. Steininger, M.D., '43	5	4	80%	310.00
Tuscola		Ewald C. Swanson, M.D., '31	6	4	67%	200.00
Wayne-Allen Park		Morris Kazdan, M.D., '35	11	7	64%	675.00
Washtenaw	(1)	John S. DeTar, M.D., '31 J. J. Woods, M.D., '24	23	14	61%	3,135.00
Ottawa		W. C. Kools, M.D., '17	10	6	60%	610.00
Wayne-Wyandotte		Nicholas D. McGlaughlin, M.D., '38	10	6	60%	445.00
Wayne-Ecorse		Lawrence H. VanBecelaere, M.D., '17	5	3	60%	625.00
Oakland-Royal Oak	(3)	Roman E. Boucher, M.D., '35	19	11	58%	2,555.00
Genesee	(2)	Henry Cook, M.D., '09	40	21	53%	2,800.00
Grand Traverse-Leelanau-Benzie		Joseph Zimmerman, M.D., '29	14	7	50%	345.00
North Central Society	(10)	Louis F. Hayes, M.D., '47	8	4	50%	850.00
Montcalm-Ionia		L. S. Dunkin, M.D., '21	8	4	50%	400.00
Lapeer		Adolph T. Rehn, M.D., '34	11	5	45%	700.00
Wayne-Lincoln Park		Dan R. Herkimer, M.D., '27	9	4	44%	425.00
Allegan, Barry and Van Buren		Kenneth C. Miller, M.D., '44	9	4	44%	280.00
Gratiot-Isabella-Clare		Joseph H. Bergin, M.D., '28	14	6	43%	385.00
Chippewa-Mackinac and Luce	(4)	B. T. Montgomery, M.D., '24	15	6	40%	1,820.00
Wayne-River Rouge	(6)	Ernest E. Belanger, M.D., '39	10	4	40%	1,300.00
Monroe		Edgar C. Long, M.D., '31	5	2	40%	200.00
Wayne-Garden City		Leslie P. Haefele, M.D., '34	16	6	38%	655.00
Macomb	(7)	Russell F. Salot, M.D., '28	23	8	35%	1,065.00
Ingham, Eaton and Livingston	(5)	B. Edward McNamara, M.D., '43	38	13	34%	1,455.00
Kent		George H. Southwick, M.D., '10	33	10	30%	562.00
Jackson and Hillsdale		Morton P. Bates, M.D., '43	24	7	29%	585.00
Oakland-Pontiac		L. Jerome Fink, M.D., '44	36	9	25%	710.00
Northern Michigan Society		Walter Larson, M.D., '31	12	3	25%	310.00
Sanilac		R. K. Hart, M.D., '28	8	2	25%	35.00
Lenawee		Arthur S. Pasternacki, M.D., '29	13	3	23%	310.00
Calhoun and Branch		Wilfrid H. Haughey, M.D., '06	13	3	23%	205.00
Oakland-Birmingham		George P. Raynale, M.D., '02	18	4	22%	450.00
Shiawassee and Clinton		Julius Janci, M.D., '35	10	2	20%	200.00
Saginaw		Lloyd C. Harvie, M.D., '18	21	4	19%	540.00
Wayne-Dearborn	(9)	Eugene H. Quigley, M.D., '38	40	7	18%	1,025.00
St. Clair		Donald A. Koch, M.D., '35	17	3	18%	400.00
Oakland-Ferndale	(8)	Eugene L. Spoehr, M.D., '26	18	3	17%	1,060.00
Berrien and Cass		Richard C. Crowell, M.D., '33	12	2	17%	200.00
Mason		Ephraim B. Boldyreff, M.D., '43	12	2	17%	110.00
Kalamazoo and St. Joseph		Kenneth L. Crawford, M.D., '29	19	2	11%	310.00
Muskegon		Charles A. Teifer, M.D., '16	9	1	11%	25.00
Bay-Arenac-Iosco and Midland		Joseph H. Sherk, M.D., '07	12	0	0	0
Delta-Marquette		Harry J. Defnet, M.D., '16	6	0	0	0
Huron		Charles I. Herrington, M.D., '19	3	0	0	0
Totals			650	221	34%	$28,722.00

Top ten leading in amounts as numbered.

MEDICAL EDUCATION CAMPAIGN

The National Fund for Medical Education, with offices in New York, is launching a five-million dollar industry-wide solicitation campaign in support of medical education in the United States.

Colby M. Chester, newly appointed chairman of the fund's Committee of American Industry, will direct a nation-wide organization to mobilize business concerns behind the nation's hard-pressed medical schools. Mr. Chester is honorary chairman of the board of General Foods Corporation.

The National Fund for Medical Education is a lay organization which is working in conjunction with the American Medical Education Foundation, founded by the American Medical Association two years ago. The AMEF's goal for 1953 is included in the five million dollars.

The National Fund's Committee of American Industry, which will spearhead the campaign, will be composed of 100 ranking business leaders from every segment of industry. Their task will be to educate industry as to the critical needs of the medical schools. The committee contemplates solicitation of 25,000 American business concerns during 1953. Mr. Chester plans to appoint a vice chairman, an advisory council, and division chairmen, who will direct the activities of more than 50 industrial committees. E. J. Ade, New York, has been appointed fund-raising director for the campaign.


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Pneumococcal, viral,
and other pneumonias
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Editorial Comment

BOOK ON CANCER SENT TO SCHOOLS

Michigan high school students—some of them, anyway—are going to be brought up with a knowledge of cancer, and what to do about it, by virtue of a book especially prepared for that purpose by the Michigan State Medical Society.

The book, a 68-page pamphlet-text, was prepared principally by Dr. F. L. Rector, secretary of the society's cancer control committee, and copies have been sent to all of Michigan's 750-odd public and parochial high schools.

The purpose is to encourage teaching about cancer as part of anyone's normal education, without any "scare technique," but simply a matter-of-fact discussion of how to detect signs of early cancer, and what to do to cure it.

Occurs at Any Age

The book is called "The Story of Cancer for High Schools," and points out that cancer can occur at any age, even though the biggest death toll is between the ages of fifty-five and seventy-five.

In 1951, Michigan had 92 cancer deaths among children under five; 36 from five to nine; 29 from ten to fourteen; 40 from fifteen to nineteen. From that age the number rose gradually to 1,350 in the age brackets sixty to sixty-four, and sixty-five to seventy.

The Michigan Department of Health and the Michigan division of the American Cancer Society paid a large part of the cost of printing the first 5,000 copies, with five going to each high school.

However, it was anticipated that some schools would want more and the demand already is starting to come in.

Ask More Copies

In the southeastern division of the Cancer Society (Wayne, Oakland and Macomb counties) about thirty-five schools already have asked for more books, Edward W. Tuescher, executive director of the division, said. Another printing is now being planned. Said Tuescher:

"We think it will be money well spent. The book is excellent, in addition to material we already have made available to the schools."

The book is, however, the first publication specifically designed to teach high school classes the basic facts about cancer and how to combat it.

It also lists supplementary texts, magazines and motion picture films on the subject. Detroit schools, in fact, already have had nearly all of that material made available through the cancer society, along with five motion picture films on the subject.

Shows Cancer Growth

In general, the idea is to include cancer education as part of high school science classes; whether any schools might insert a special course devoted to cancer is a matter of speculation.

The text is written in straight-forward language, neither too technical for ready understanding, nor in oversimplified "popular" form. It explains how cancer cells, multiply far beyond the normal rate, rob normal tissues of nourishment and, in fact, actually "starve healthy tissues to death."

Also included are photographs, drawings and charts, showing how cancer spreads, but more particularly showing cancer in early stages when it still can be cured by surgery, x-ray or radium.

The book warns against quack remedies, with particular caution against pastes, salves or other medicines, or "secret' potions supposed to prevent cancer.

Author Praised

Emphasis throughout is on the theme that:

"Young people can help control cancer by understanding it, and by replacing an unreasonable fear of cancer with a sane, sensible, cautious attitude toward the problem."

The book, from the personal standpoint of Dr. Rector, is a high point in a long career devoted to cancer education, Dr. Norman F. Miller of the University of Michigan commented in a preface:

"The book represents more than a progressive and necessary forward step in cancer education.

"It began with and reflects the work and farsightedness of a man who has probably saved more lives than most of us who daily are engaged in the actual treatment of cancer patients. A pioneer in the field, Dr. Rector for over a quarter century has been actively engaged in the work of telling people about cancer."

—Jack Pickering in
The Detroit Times,
Nov. 27, 1952.

Carcinoma is found simultaneously in both breasts in about 1 per cent of cases.

* * *

About 5 per cent of patients treated for carcinoma of the breast will later develop the disease in the other breast.

* * *

About 60 per cent of patients with breast cancer have axillary metastases when first seen.

* * *

Almost 100 per cent of *late* pelvic malignancy can be diagnosed easily and almost none of it cured.

* * *

There is no magic key to the diagnosis of early malignancy in any tissue.

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The Importance of History and Physical Examination in the Diagnosis of Heart Disease

By Samuel A. Levine, M.D.
Boston, Massachusetts

MR. PRESIDENT and friends, I want to thank you all and the officers of the Michigan Heart Association and the Michigan State Medical Society for asking me to come here. I have seen a good many old friends here. It reminds me of what has been going on in Boston. When I was a little boy at school, I recall that Boston was the fourth largest city in the country; New York, Chicago, Philadelphia, Boston, and St. Louis. Since those early days, Boston has sunk to fifth, sixth, seventh, eighth, and is now maybe ninth or tenth. Detroit has come up pretty high on the scale. Boston has been stagnant as far as physical growth, but I comfort myself with the thought that it may not have been altogether static as far as medical matters are concerned. There are so many fellows around here who are reputable citizens of our medical community who must be proud of their early training in Boston.

I want to spend this session in discussing what a doctor may do in his office, at the bedside, or at a patient's home in trying to arrive at a diagnosis and indicate a course of therapy when cardiac problems are involved. It is amazing that in the field of heart disease, a great deal can be accomplished with the simple methods we all have with us, in our heads and in our bags. That is not true of many aspects of medicine. You cannot make a diagnosis of cancer of the colon or other gastrointestinal pathology by these simple means. This requires x-ray study for diagnosis. It is extraordinary how many cardiac diagnoses you can make just on your own, and it is this point of view that I would like to emphasize here this noon.

First, the past history.—Everybody that comes to the doctor for the first time should be asked whether he ever had chorea or rheumatic fever. If the answer is in the positive, you would immediately say there is an even chance that there is a valve lesion. That is considerable reward for a simple question. There are not many questions that you could ask in a past history that would give you as much information as that . If anybody says that he had rheumatic fever, you would immediately say, "There is an even chance that I am going to find heart trouble with some valvular lesion." You are all the more driven to look carefully for the signs of valvular disease. You would spend a little more time with auscultation than you would with a patient who comes to you with a broken leg or has eczema. When you do not obtain a bona fide history of rheumatic fever and there is some reason to make you wonder about it, you must ask some other questions. Subsidiary evidence, such as a family history of rheumatic fever, will make you suspicious of a particular person and may be evidence in favor of rheumatic heart disease, because we know there is a familial factor in this disease. Did he have growing pains, an unusual degree of nose bleeds in childhood, or spring fever? Spring fever means something. Rheumatic children have their peaks of activity around March. It is curious that the surgeons in Boston are finding more active rheumatic carditis in the biopsies of the auricles in the last month or two than they did before. Dr. Dwight Harken and his men commented about that to me the other

Read before the Michigan Heart Association, Detroit, Michigan, March 14, 1952.

day. Many auricular appendages they are taking out are showing Aschoff nodules. You find them anyway now and again in people who have no evidence of any activity, but more have been occurring this spring. March, the Ides of March, is certainly a peak month in New England for rheumatic activity. Also, we should ask the patient whether he was ever refused life insurance because of a murmur. Such questioning may explain why some patients who have calcific aortic stenosis at the age of sixty have rheumatic aortic stenosis and not Monckeberg's sclerosis. You see some patients at the age of fifty or sixty with aortic stenosis who have symptoms for a year or so, but who were thrown down for insurance at the age of twenty because of a murmur. They did not have arteriosclerosis at the age of twenty. Yet, in fact, it took thirty or forty or more years to mature into a full blown aortic stenosis that you recognize at the age of fifty or sixty. Those little points are helpful in fitting together the jigsaw puzzle of rheumatic valvular disease.

The same thing is true about school examinations. Children are examined at school and you should inquire whether the doctor made a fuss about their hearts when they were young. You also should ask about murmurs at birth. That is not so helpful because murmurs are often overlooked at birth. What about a murmur heard during the first year of life? You do not see rheumatic fever the first year of life. These questions may help you to decide whether you are dealing with a congenital or an acquired lesion. Was there early cyanosis? Was there early squatting? Squatting in a child is a peculiar kind of habit and it makes you think of a congenital tetrology of Fallot. Did the mother have German measles during the first few months of pregnancy? If so, it would be more likely that the child has a congenital lesion. What month was the baby born? If a child was born during the months of May to August, inclusive, it is very unlikely to have patent ductus arteriosus. Dr. D. Rutstein, of Boston, has made an ingenious study. He found that children born during those months do not have patent ductus; the birth month of all the patients with patent ductus were scattered over the other months of the year. Such a clue may at times be helpful in diagnosis.

Family history.—There certainly are headache families, allergic families, neurotic families, and there are vascular families. These familial tendencies do not lead to an unequivocable diagnosis, but they lend support one way or another in doubtful cases. The easy diagnoses in medicine you never have to worry about. You do not have to worry about the diagnosis of exophthalmic goiter if the patient has exophthalmus, has a big goiter, and gives a complete history of a thyrotoxic state. The patient then knows the diagnosis himself. We have to worry about the diagnoses that are difficult to make. In those difficult diagnoses, you weigh all the evidence, and a little straw may make you lean in one direction or another. Certain kinds of distress in a person whose family is riddled with coronary artery disease would mean a good deal more than the same kind of distress in a person whose family is free of vascular disease and is riddled with neurotic disease. There are hypertensive families, there are rheumatic fever families, and there are coronary families.

Present illness.—Shortness of breath, of course, is a cardinal sign of left ventricular failure or cardiac insufficiency. But there are different kinds of shortness of breath. There is a shortness of breath that young people (less frequently, older people) have at rest. You can make the diagnosis often in one minute. Although they are short of breath at rest, they look well. While you take the history, you often see them go through the phenomenon of deep overventilation and sighing breathing. They cannot get enough air and that is practically pathognomonic of a neurotic, a function state. When a young fellow (or girl) takes in 2500 cc. of air with one breath and complains he does not get enough, he is taking in five times as much as he needs and he wants more. It only requires about 400 cc. per breath to breath normally. A cardiac who has true dyspnea could not ventilate that well if his life depended upon it. These functional patients overventilate. If you watch them, you see them take deep sighs. You should stop and say, "Is that what you mean? Were you short of breath then?" They generally reply, "Yes, I can't get enough air." That means there is a functional disturbance of some sort.

Paroxysmal nocturnal dyspnea. — Paroxysmal nocturnal dyspnea is the kind of breathlessness that wakes a person up at night. Sometimes, people wake up and feel short of breath, and turn right over in a few seconds or a few minutes and go

right back to sleep. That is not true paroxysmal nocturnal dyspnea. When paroxysmal nocturnal dyspnea awakens people from sleep, they stay awake for a while—five minutes, ten minutes, half an hour or more. They jump out of bed or sit on the edge of the bed. Sometimes they smoke a cigarette, and they think the cigarette is what made them feel better. It is the difference in posture that made them feel better. Or they go to the window, and open the window to get fresh air. It is not the fresh air as they might have done the same thing with stale air. It is posture. They sit up; there is less return flow to the right side of the heart and there is a chance for an equilibrium to take place between the left and right ventricular output. They feel better and go back to bed. Generally, they have a little wheeze with these spells and maybe a little cough. The wheeze and the cough and the postural change generally mean acute left ventricular failure, which is common in the hypertensive, in the coronary or the aortic case. It also may occur at times with mitral stenosis. The right ventricle as a result of a dream or some other cause puts out more blood into the lungs than the left ventricle can receive through the narrowed mitral valve. They have a temporary imbalance with pulmonary engorgement until the situation is rebalanced.

There is a peculiar kind of shortness of breath that you may see occasionally with acute pulmonary embolism. I do not mean the kind that is fatal immediately. Such patients breathe like a fish out of water, or as if they have a foreign body in their throat. They go through quite a gasp and yet do not take in much air. They struggle without much movement of the chest. The movement is mostly of the face and neck. This sign on occasions has helped me to suspect a pulmonary embolus. Paroxysmal noctournal dyspnea doesn't occur particularly in pulmonary emphysema with dyspnea of a bronchial nature. Such patients may lie flat comfortably and yet be short of breath on slight effort.

Palpitation.—A word about palpitations may be of interest. There is a lot we can learn about palpitations if we take a few minutes off and try to imitate the types of palpitations to our patient. If you see a patient in the attack, you can identify the condition as auricular fibrillation, tachycardia, extra systoles, et cetera. But they often have their attack when we are not present, and we can only make the diagnosis from the history. It is well to ask them, "Does it feel like this or like that?" (The physician tapping his chest rapidly and regularly, then rapidly and irregularly, and finally, normally with an occasional quick beat.) Often the patient will quickly say that it feels like this type or the other. It tells you that one is dealing with tachycardia of the auricle or fibrillation of the auricle, or possibly just extra systoles. This technique is much better than trying to guess at the diagnosis.

Pain.—Pain in the chest is the most difficult and the most important symptom to appraise. You have to talk to the patient quite a while to distinguish the different kinds of pain or distress. In angina pectoris the location, as you know, is mostly sternal rather than apical. You should ask the patient what the sensation feels like. He should describe the character of the pain in his own words. Do not write down "pain" because it ought to be a pain, for it is often not. It is frequently a constriction or pressure or burning or tightening or fullness. Write down the terms they use, where it is felt and how long it lasts. Where does it radiate and where does it start? Sometimes it starts peripherally and goes centrally, but more often it starts centrally and goes peripherally. And lastly, watch them while they describe it; that is very helpful. They go through different maneuvers than other kinds of pain will evoke or than the neurotic will utilize. They may say, "I have a funny feeling," and curl and clutch their fingers. A neurotic does not do that. The latter may say, "I have this awful pain here," pointing to the region of the apex; while the anginal patient will say, "I've got this funny feeling here," grasping the center of his vest. That is almost pathognomonic of coronary artery distress. Or they may say, "I don't know how to describe it." That is another type of reply. We should then write down in our notes, "I don't know how to describe it." There are people who cannot describe the sensation. That is their reply, and the only reply they can give. However, they may go through this peculiar clutching gesture. It means a good deal to observe that kind of reply. Of greatest importance is that anginal distress is related to physical effort. It particularly comes on walking or hurrying, carrying something, going up hill, in cold air, or after meals, or on emotional upsets. The exact relationship between effort and anginal pain is not altogether clear. It is peculiar

that some patients with angina can go through a good deal of effort indoors and cannot walk a block to the streetcar. They may be able to do a heavy day's work, swinging beams and going through all sorts of physical gyrations, and have no trouble, but they cannot walk home. To me it is not satisfying to explain this whole story on a matter of foot pounds of work. There are some other unknown factors involved, possibly vasomotor, neurogenic, skin changes et cetera.

There is a similar pain on effort in the right upper quadrant in some cases with right-sided failure, such as mitral stenosis in which the liver is congested. This pain is not anginal in nature, but probably due to stretching of the capsule of the liver. This may be regarded as right-sided embarrassment or insufficiency on effort. Dr. T. R. Harrison and his colleagues have recently written a very valuable paper on angina-like symptoms coming in cases with right ventricular strain (not coronary artery disease), such as mitral stenosis or pulmonary hypertension. There is one little point about the pain of angina that has been interesting to me. There are all sorts of tests for angina, anoxemia tests, two step tests, Ballistocardiograms, flicker photometer, and so forth. All these tests have been used to obtain information about coronary artery disease. But there is one test that so far has been almost invariably correct in my experience. It can only be applied if you see a patient while he has a spell. My presence evokes angina very often in my office. Patients come in feeling all right, sit down at my desk, and I begin taking the history. Before many minutes have elapsed, they begin to have an attack. I have had, therefore, a fair opportunity of seeing these people during anginal pain. Now, if I see a patient in a spell, I stop all work as I do not want the pain to disappear before I have performed this test. I listen over the precordium and massage the carotid sinus. If significant slowing of the heart occurs, the pain should lessen or disappear. You do not tell the patient what to expect. You should ask whether the discomfort is any worse, not if it is better. When you have to ask a leading question, you are more likely to learn the truth if you try to mislead the patient. It is better to ask a patient who may have anginal chest distress whether it goes into the right arm expecting him to reply that it radiates to the left arm. When this test is done and slowing occurs, the reply is likely to be, "No, that pain is gone" or "The pain is lighter." You would not want to talk him into saying that the pain is better. When he replies that the pain is gone or better it is angina. This effect will occur not in minutes but in seconds. In one case the pain disappeared during the prolonged asystole produced by carotid sinus stimulation while the heart was not beating. I have found this test very useful in some doubtful cases where the distress was confused with the symptoms of gall bladder disease. The interpretation of the test is only valid if slowing occurs, as I do not believe that pain due to causes other than angina will disappear in this fashion. If no slowing occurs, no conclusion can be drawn.

Let us now turn to another topic, i.e., masked thyrocardiacs. It is very important for us to look for the things we can do something about. That is much more important than making a detailed electrocardiographic diagnosis as to whether the infarction is lateral, posterior, or anterior. If you know the patient has coronary thrombosis, you treat him a good deal the same no matter where the infarct is. When thyrocardiac disease is overlooked, a curable or reversible condition is neglected. You will never have to worry about the cases that are easily recognized. The masked ones are being overlooked by all of us, including myself. You have to look for the subsidiary features of thyrotoxicosis such as sweating, accentuated heart sounds, failure to respond to digitalis, loss of weight with a good appetite; all the various clues that we know so well but we do not think about at the right time. Are the bowels too active? Chronic cardiacs who are bedridden or who have been sick a long time do not have normal bowel movements; they usually are constipated. Some of these patients say that they have bowel movements two or three times a day without any help. That is not normal for chronic cardiacs. Or at night they sleep with one sheet over them when everybody else in the family has all kinds of covers and blankets. They feel warm. I made a diagnosis walking into a cold bedroom of a patient who in the middle of the winter would sleep calmly with his feet sticking out beyond a simple bed sheet for a cover. Thyrotoxicosis had been entirely overlooked. The observation was enough to make me think of thyrotoxicosis. The suspicion was later confirmed and when the thyroid disease was cured, his angina practically disappeared. Early gray hair is a point to think about. Many normal people have early gray hair, but there are some peculiar people who have

it too. Amongst them are thyrotoxic individuals and patients who have or have had pernicious anemia.

Physical examination.—Let us now take up some points in physical examination. What does the patient look like? I think it is very valuable to get your impressions about people. I just mentioned early graying of the hair. Are they of the pernicious anemia type? It is a lot more important to recognize pernicious anemia than it is to detect cancer of the pancreas. We can cure one; we cannot do much about the other. Has the patient nice skin and soft, silky, gray hair, and smooth tongue? He may come to a physician with cardiac symptoms when all he needs is liver or Vitamin B_{12}. In fact, if you have been treating a patient for pernicious anemia anl you find a dirty tongue, you better revise your diagnosis. He may have a cord tumor rather than combined system disease. That mistake has been made in the best of medical circles. I recall a case that was diagnosed as pernicious anemia with combined system disease, but the tongue was dirty and that did not fit the diagnosis. It should have been smooth and clean. He had a cord tumor. That was cured and the combined system disease melted away. Another physical type is the sturdy, strong person who suggests coronary disease, or the slight stare of the eyes of thyroid patients. You may have nothing more than that to go by, a slight start, even a unilateral stare, one eye looking a little different than the other, not a true exophthalmos, but something asymmetrical about the expression of the eyes. That can be your clue. The flushed neck of the women who are or who are going to be hypertensive is another clue. They come in to your office and appear normal, but by the time you have taken their history, their neck is rosy and flushed. They are almost invariably hypertensive people, or candidates for hypertension.

Blood Pressure Determinations.—Start up high enough. Many a patient has his blood pressure read wrong because the doctor did not start high enough. He began his observation in the auscultatory gap. The first time you take the pressure, you ought to hold your finger at the wrist to be sure you start the reading above the systolic level. Then spend five seconds holding the mercury at the level at which the systolic reading first comes through and see whether there is any alternation. It is a simple sign, a valuable sign; the sounds come through regularly but with alternate intensity. In the regular heart when the sounds alternate, it means pulsus alternans, a sign of left ventricular weakness.

Petechiae.—We know petchiae are signs of subacute bacterial endocarditis. It is surprising how often they are overlooked. Just one petechia with a little gray center at the crevice of the eyelid is all you may need to make the diagnosis of subacute bacterial endocarditis. A petechia is not going to shout out, "I'm here; look for me." You must look for it. Some petechiae are overlooked because the eyelids are not examined in the proper way. In order to see the innermost fold or crevice of the conjunctival sac, it is best to pick up the lower lid between the thumb and index finger. Nowadays it is no academic question whether you make the diagnosis in January or in July. It may be a matter of life or death to the patient.

Clubbing of the fingers.—This is easy to detect if you look for it. It may help in the diagnosis of subacute bacterial endocarditis, congenital heart disease with cyanosis, chronic suppuration, a-v fistula of the lung, though it occurs in some other conditions.

The Heart Itself.—A forceful lifting apex impulse generally indicates left ventricular hypertrophy. Everything we can ascertain nowadays that aids in accurate anatomical diagnosis of the valvular diseases is important. We now need to know whether the patient has mitral stenosis and not aortic stenosis, or mitral stenosis with aortic stenosis, or mitral stenosis with tricuspid stenosis. The surgeon may not help the patient very much when he operates for mitral stenosis if aortic stenosis and tricuspid stenosis are also present.

One could discuss auscultation for hours. It has been a much neglected subject. Dr. Franklin Johnston has been impressed by this need, and he is trying hard to teach it, which is certainly not true in many places. Old-fashioned auscultation was thrown out of the window when electrocardiography came in. However, it is coming back now. It is a very important part of our examination. Nowadays it is all the more important. A lot can be learned from auscultation. You have to listen with intelligence and care. You cannot listen to a heart promiscuously. There are four things to

note—two sounds and two intervals. You must listen to one thing at a time. If you do not, you are going to miss important points. You must say to yourself, "I am going to listen to diastole," and forget everything else, so that when you get through you will not be able to tell whether a systolic murmur is there because you did not listen to systole. If you listen that intently, you will hear everything that is going on in diastole. Is there a third sound? Is there a rumble? Is there a presystolic murmur? These are vital findings now. Is the first sound accentuated? If the first sound is accentuated, you start thinking about thyrotoxicosis, mitral stenosis, and short P-R interval. We find what we look for, but you must have clues to guide you to look for the right things and these are some of the clues that will help you. You will listen all the more intently with the patient in the left lateral position to hear the diastolic or presystolic rumble which would otherwise escape your attention entirely. The diastolic gallop must be detected. It is an ominous sound. Systolic gallop is a benign sound. You must learn to distinguish the one from the other, and it can be done.

As far as the lungs are concerned, beware of making a diagnosis of heart failure when the signs of congestion are at the left base and the right base is clear. Look for some other cause—pulmonary infarction, pulmonary infection, pneumonia, bronchiectasis, or tumor. It does occur when the right pleura is bound by adhesion; in that case there may be a left-sided hydrothorax with the right base fairly clear. At least look for some other than a cardiac mechanism if the signs are at the left base and not at the right, because you expect cardiacs to have signs predominantly or solely on the right. This has helped me to think of cancer or other local causes such as bronchiectasis. I recall seeing a patient many years ago who was given a prognosis of six months. She had râles at the bases, hypertension, a heart murmur, puffiness of ankles and inversion of the T-wave in lead one. On close analysis, none of these features indicate heart failure. The hypertension, the inverted T-wave, and murmur did not. The puffiness in the ankles of a woman who had five children did not mean much, and the râles were on the left side. She died of heart failure about twenty years later at the age of eighty-four. She never had signs of heart failure until the last few years of her life. She had a little bronchiectasis at the left base and the râles stayed there all that time.

Râles need interpretation. They may have a different significance in one person than in another. Expiratory squeaks are generally bronchial in origin. Cardiac failure râles are moist inspiratory râles. Some patients with acute pulmonary edema, however, have both mechanisms. When the patient has râles all over the chest, front and back, and they are due to heart disease, that patient is desperately ill. If you hear many râles front and back in a cardiac or so-called cardiac, and the patient is not desperately sick, the râles are most likely due to bronchial emphysema or asthma rather than cardiac congestion. The prognosis and treatment is entirely different in the two.

As far as edema is concerned, patients who are staying in bed and resting a good deal may lose their edema of the ankles but it appears in the sacral region. We still too often hear the house doctor say the patient is getting better because the edema of the ankles is gone. When the patient is in bed we need to examine the lower back. The fluid may only have shifted upwards.

Get in the habit of feeling the femoral pulse. That should be a routine. If we develop habits early in life they become reflexes; then you do not need to worry about them. We reflexly feel a pulse at the wrist, but we must also reflexly feel the femoral pulse. In any person who has even a slightly elevated blood pressure, finding an absent or feeble femoral pulsation challenges you to look for coarctation of the aorta. We need to make that diagnosis now, not when patients are forty years of age and have marked sclerotic changes or when the aorta has become thin below the coarctation but as early as possible. We want to make the diagnosis early because it can be cured. It is a simple diagnosis to make. It is overlooked because someone has not examined the femoral pulsation. If anyone has an elevated pressure in the arms and you cannot feel adequate pulsations in the femoral arteries, that patient should be suspected as having coarctation of the aorta. Finding the blood pressure in the legs lower than in the arms and detecting changes in the lower margins of the ribs or alterations in the appearance of the aorta on x-ray examination may then clinch the diagnosis.

It is a reflection on the medical profession to realize that last year I saw two adults in short order, one a woman twenty-five years old and another thirty-seven years old, in whom diagnosis

(Continued on Page 50)

Treatment of the Nephrotic Syndrome

By Lloyd T. Iseri, M.D., Ivan J. Mader, M.D., and Douglas E. Chandler, M.D.

Detroit, Michigan

NUMEROUS new therapeutic measures have recently been introduced for the treatment of the nephrotic syndrome. The present paper attempts to evaluate these various measures. A patient with nephrotic syndrome is presented because of several forms of treatment he received.

Case 1.—R. E. (52,6486), a fifteen-year-old Negro boy, was first seen March 25, 1951, with a three-week history of progressive edema involving the face, hands, feet, scrotum, and abdomen. The past history was negative for hematuria or facial edema. Tonsillectomy had been performed in 1946 without sequelae. Examination showed a Negro boy with the typical nephrotic syndrome and anasarca. The blood pressure was 130 mm. Hg, systolic and 90 mm. Hg, diastolic. The blood hemoglobin was 13.5 gm., serum alubumin 1.54 gm., and serum globulin 2.86 gm., per 100 ml. The Kline test was negative. The corrected glomerular filtration rate was 115 ml. per minute, renal plasma flow, 580 ml. per minute, and maximal tubular excretion for para-amino-hippurate (TmPAH), 117 mg. per minute. Plasma sodium concentration was 140, potassium, 4.56, chloride 98.3, and carbon-dioxide combining power 26 mEq. per liter. The blood urea nitrogen was 11 mg. per 100 ml.

After numerous unsuccessful attempts to reduce the edema with dietary management, with two courses of melamine therapy and with one course of intravenous salt-poor albumin, a ten-day course of adrenocorticotropin (40 mg. per day) therapy was given. This resulted in partial evacuation of the edema. The patient was discharged July 6, 1951, with minimal edema, but was readmitted November 14, 1951, after anasarca had again developed. The serum albumin was now 0.8 gm. and globulin 2.3 gm. per 100 ml. The blood urea nitrogen was 13 mg. per 100 ml. and the plasma carbon-dioxide combining power 22 mEq. per liter.

Because of the extremely low serum albumin level, a six-day course of intravenous salt-poor albumin, 25 gm. per day, was given. This was followed by a twelve-day course of adrenocorticotropin, 48 mg. per day. With the albumin infusions, the body weight fell promptly from 47.57 to 43.62 kgm., but rose again to 48.4 kgm. during the first ten days of adrenocorticotropin therapy. During the last two days of adrenocorticotropin therapy, the weight fell to 45.27 kgm. and continued to fall, reaching a minimum of 42.44 kgm., three days later. Increased urine output and the disappearance of edema accompanied the weight changes.

In spite of a 200 mg. sodium diet and potassium citrate salts (6 gm. per day), the weight rapidly rose to 48.65 kgm. and edema returned.

Another course of adrenocorticotropin was then given, this time in conjunction with albumin therapy, in an effort to determine whether or not the increase in edema during the initial stages of adrenocorticotropin administration could be prevented by the simultaneous use of salt-poor albumin. As depicted in Figure 1, only the first infusion of salt-poor albumin was effective in decreasing the body weight. The second and third infusions, administered after the adrenocorticotropin had elicited a maximum influence on the adrenal cortex, were ineffective in preventing the accumulation of fluid. Although the decline in body weight did not occur until nine days after combined therapy had been instituted, the urine and sodium excretion had already begun to increase by the sixth day. The maximal excretion of urine and sodium occurred the day following cessation of adrenocorticotropin and totalled 5,450 ml. and 910 mEq., respectively. The serum proteins rose slightly just prior to the onset of diuresis, but a greater rise occurred after the diuresis had become maximal. The patient became free of edema.

Within the next two weeks, however, there was a gradual reaccumulation of edema fluid. Since it was obvious that a relative state of edema-free remission could not be attained and maintained by adrenocorticotropin therapy and a 200 mg. sodium diet, the efficacy of an ion-exchange resin was next evaluated. The results are shown in Figure 2.

The patient was first placed on a 1000 mg. sodium diet with no other specific forms of treatment. As can be seen in the illustration, there was a rapid increase in weight from 43.96 to 46.05 kgm. The ion-exchange resin* was then given in doses of 15 gm. three times a day. The rapid weight gain was prevented, but diuresis was not initiated and edema persisted. After reduction of dietary sodium to 500 mg. per day, the weight declined steadily from 46.75 to 43.55 kgm. and the edema was eliminated from the subcutaneous tissues. Omission of ion-exchange resin for one day resulted in a transient gain of 0.40 kgm. of body weight. During the initial five-day period of ion-exchange resin therapy, the plasma carbon-dioxide combining power fell from 19.2 to 11.4 mEq. per liter and the plasma chloride rose from 101 to 107 mEq. per liter, indicating a tendency toward hyperchloremic acidosis, a complication of ion-exchange resin therapy. Readjustment of electrolyte balance, including a rise in the low plasma sodium level, took place even though the resin treatment was continued. As has been noted often by others, the evacuation of edema occurred with no significant change in the serum protein concentrations. The patient was discharged February 18, 1952, on a 500 mg. Na diet and 45 grams of ion-exchange resins per day. He remained in a relative state of re-

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*Carbo-Resin, supplied in generous quantities by Dr. B. L. Martz, Eli Lilly and Co., Indianapolis, Ind.

mission until May 14, 1952, at which time he was readmitted with generalized anasarca.

The patient had contracted an upper respiratory infection and had subsequently become intolerant to the ion-exchange resin. There was evidence of pneumonitis in both lung bases, which was readily controlled by antibiotics. The serum albumin was 1.0 gm.; globulin, 2.5 gm.; serum cholesterol, 720 mg.; blood urea nitrogen, 29 mg. per 100 ml.; and the plasma carbon-dioxide combining power, 16 mEq. per liter. The white blood cell count was 18,500 per cu. mm. and the hemoglobin concentration, 9.2 gm. per 100 ml. Urinalysis showed 4 plus albumin with 8 to 10 white blood cells per high power field. The eosinophile count was 2,597 per cu. mm.

The patient received a short course of salt-poor albumin therapy with no effect. This was followed by a

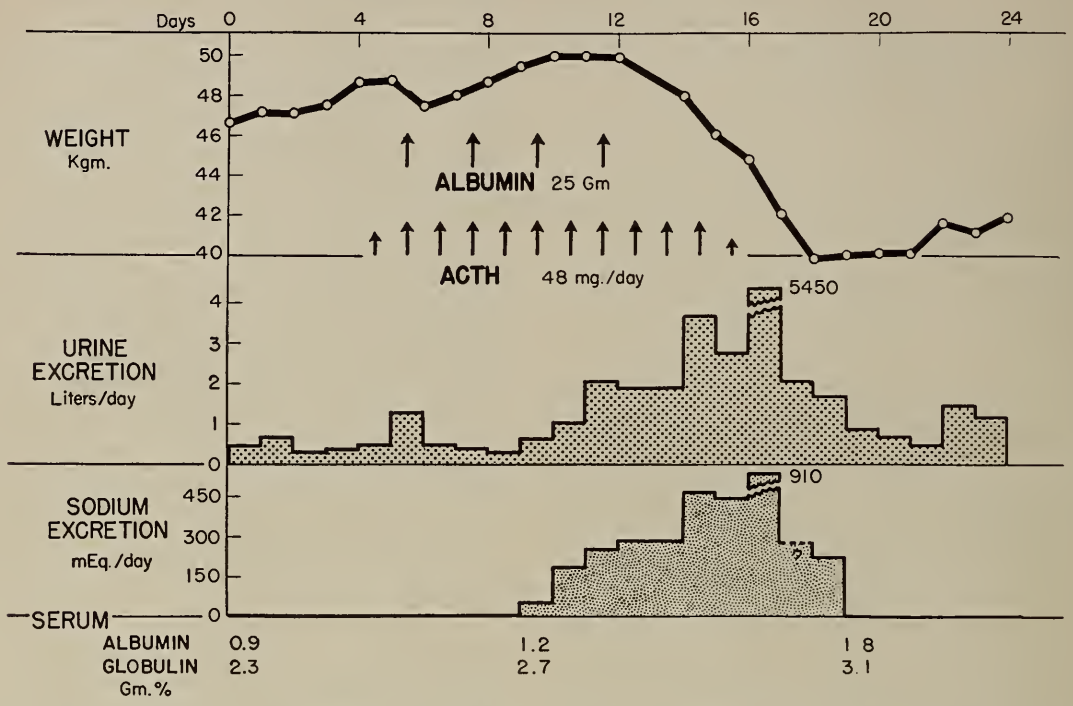


Fig. 1. (R. E., 14 yrs.) Effect of combined albumin and ACTH therapy in nephrotic syndrome.

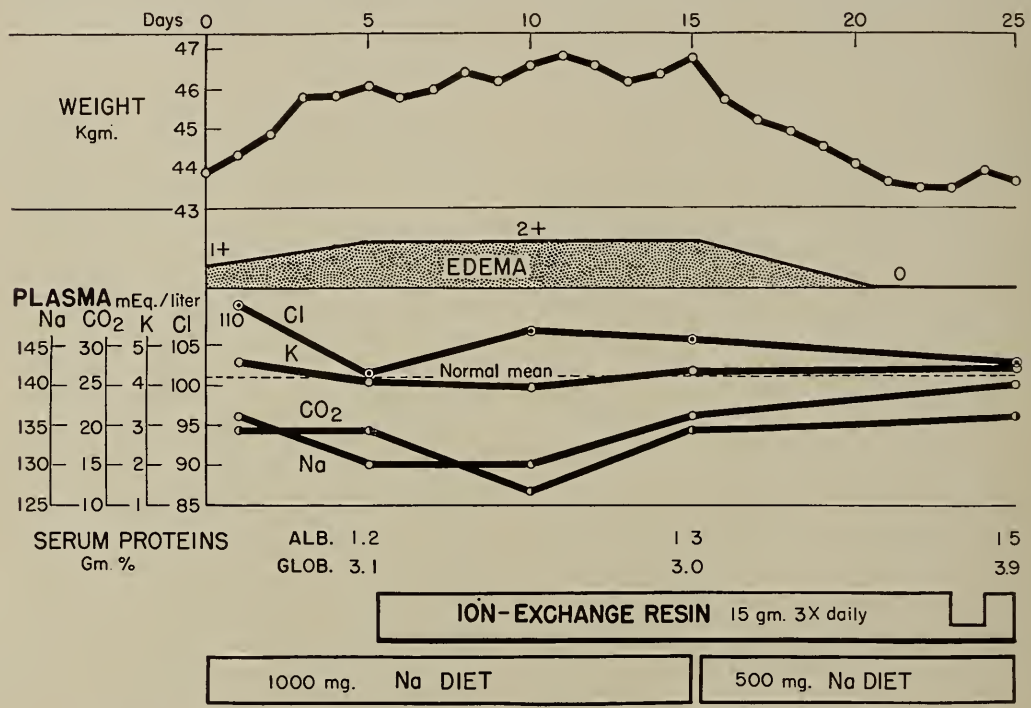


Fig. 2. (R. E., 14 yrs.) Effect of ion-exchange resin in nephrotic syndrome.

ten-day course of adrenocorticotropin therapy. There was a weight gain from 52.45 to 54.46 kgm. during the first five days. The weight then remained stationary for the remaining five days of therapy and for four days after lowered to 120/90 mm. Hg but the weight continued to increase to 56.90 kgm. In addition, the patient had a mild episode of thrombophlebitis and also developed typical striae on the thigh, one of which became in-

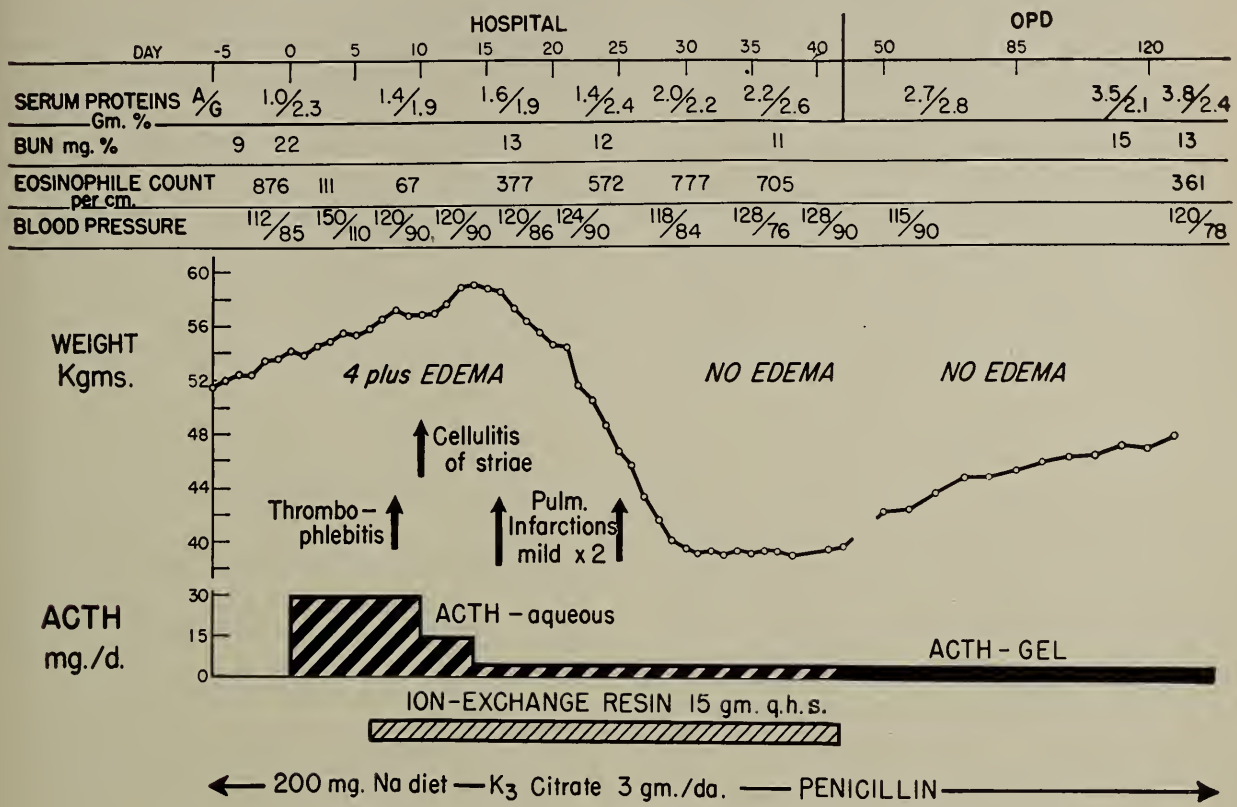


Fig. 3. (R. E., 15 yrs.) Treatment of nephrosis with adrenocorticotropic hormone.

cessation of therapy. The reason for the failure of ACTH withdrawal to induce diuresis was, no doubt, the result of a superimposed cellulitis of the thigh, which had occurred immediately after discontinuance of adrenocorticotropin. With control of the infection by large doses of penicillin, there occurred a delayed but rapid diuresis with a fall in weight from 54.60 to 50.4 kgm. A considerable amount of edema still remained, however. Gradually, the fluid reaccumulated, even on a 200 mg. sodium diet, and the patient's weight again rose to 54.15 kgm.

It was then decided to investigate the effect of prolonged ACTH therapy on the elimination of edema and on the maintenance of a relative state of remission. The results of this study are shown in Figure 3.

After a control period of observation, when a progressive increase in weight and a normal blood pressure were observed, adrenocorticotropin injections of 30 mg. per day were started. Within five days the blood pressure rose to 150/110 mm. Hg and the weight increased from 54.15 to 55.20 kgm. The patient was mildly euphoric by this time. A good eosinophile response to ACTH was obtained, the count falling from 816 to 111 per cu. mm. The adrenocorticotropin was continued at 30 mg. per day for another five days and 15 gm. of ion-exchange resin at bedtime was added to the regimen of a 200 mg. sodium diet (with 90 gm. of protein) and 3 gm. of potassium citrate per day. The blood pressure was fected. These complications subsided with an increase in penicillin therapy and with reduction of ACTH to 15 mg. per day. The weight, however, continued to increase and reached a peak of 59.10 kgm. four days later. By this time the patient was tremendously edematous. He then suffered a mild pulmonary infarction with a rise in temperature, pulse, and respiratory rate. The infarction was confirmed radiologically. The adrenocorticotropin was reduced to 5 mg. per day and this dosage was maintained for the remaining twenty-eight days in the hospital. Two days after reduction in dose of ACTH, a diuresis took place and the weight began to fall sharply, so that in sixteen days it had fallen from 58.60 to 39.10 kgm. The edema was completely eliminated. The eosinophile count, which had fallen to 67 per cmm. on the ninth day of therapy, rose to 377 at the onset of diuresis, to 572 at the height of diuresis, and to 777 at the end of diuresis. The serum proteins increased slightly before the onset of diuresis and continued to increase afterwards.

In spite of a persistent proteinuria of 19 gm. per day, the patient maintained an edema-free state and was discharged to the out-patient clinic with maintenance injections of 2 units of adrenocorticotropin in gelatin daily, in addition to a 200 mg. sodium, 90 gm. protein diet, 2 gm. of potassium citrate daily, and 400,000 units of oral penicillin twice daily. During the four-month follow-up

to date, there has been a gradual increase in weight, reflecting a gain in body tissue. Edema has not recurred. The total serum proteins have shown a progressive rise from 3.3 gm. per 100 ml. at the beginning to 6.2 gm. at the end of the study. More significantly, the albumin concentration has risen from 1.0 to 3.8 gm. per 100 ml.

Discussion

A discussion of the treatment of nephrosis involves the recognition and consideration of four main objectives. These are: (1) elimination of edema; (2) maintenance of a relative state of remission and maintenance of an optimal state of nutrition; (3) control and prevention of infection; and (4) the possibility of reversion or suppression of the progressive underlying pathological dysfunction.

1. *Elimination of Edema*

Mechanical Measures.—Edema may be eliminated by several methods. First of all, mechanical means by which fluid can be removed include procedures such as abdominal paracentesis, thoracentesis, and Southey-Leech tube drainage. In general, these measures are usually reserved for patients in whom the accumulated fluid interferes with circulatory or respiratory functions. The danger of introducing infection, the loss of proteins, albeit not too great, and the ineffectiveness in eliminating edema from the body as a whole limit the use of these mechanical measures.

Diet Therapy.—Dietotherapy provides a more practical, but oftentimes a more protracted, method of reducing edema. Limitation of sodium in the diet to 800 or 400 or at times to 200 mg. per day successfully eliminates edema in most mild to moderate cases of nephrosis. Peculiarly, however, in many cases a step-like reduction in the sodium intake often results in a similar reduction of sodium excretion without an appreciable reduction in body weight. The use of sodium-free milk makes possible an adequate intake of protein without excess of sodium, but the relative unpalatability of these products often interferes with their acceptability. Much of this difficulty can be overcome by proper preparation of the milk. It should not be "chalky" and is usually better tolerated when served cold and flavored with sugar and vanilla.

Ion-exchange Resins.—Ion-exchange resins may be employed as adjuncts to the dietary management of nephrosis. Fifteen grams of resin, given three or four times a day, can effectively produce evacuation of the edema.[5,8] It is usually necessary to limit sodium ingestion to a certain extent for the resins to be effective, since their capacity to exchange ammonium and potassium ions for dietary sodium is only about 0.5 mEq. per gram of resin. This can be illustrated well in the case reported here (Fig. 2). Forty-five grams of the ion-exchange resin was ineffective when a 1000 mg. sodium diet was given, but was decidedly effective when a 500 mg. sodium diet was substituted. Hyperchloremic acidosis may complicate the use of these resins even though anion-exchange resins are included in the preparation. Hyponatremia and hypokalemia may also supervene occasionally. Care must be doubly exercised in patients with renal insufficiency.

Alkaline Sodium Salts.—Although alkaline sodium salts have been reported to effect a diuresis in nephrotic patients,[7] this has not been a constant finding[9] and the severe progressive exaggeration of edema, which this form of therapy imposes before diuresis can be expected, appears to be a formidable objection, even for a therapeutic trial.

Nitrogen Mustards.—Another recent innovation in the treatment of nephrosis is the use of nitrogen mustards.[4,18] Diuresis, if it does occur, begins early in the course of treatment, but the response is quite inconstant and more than one course may be necessary. The exact mode of action is not known, although interference of the antigen-antibody reaction has been suspected. Proteinuria seems to decrease in severity. Although specific renal function studies in patients with normal function (Hodgkin's disease and cases of leukemia) show no change with melamine, an analogue of nitrogen mustard,[16] it is possible that in nephrotic patients, with abnormal renal functions, the kidney may be adversely affected, diuresis occurring because of renal damage. In one case of nephrosis treated successfully by us with a total of 10 mg. of melamine, the glomerular filtration rate fell from 90.7 to 58.0 ml. per min. and the maximal tubular excretion for para-amino-hippurate fell from 47 to 24 mg. per minute. Renal plasma flow remained constant at 865 to 890 ml. per minute.[16] Toxicity from nitrogen mustards is often quite serious and thus the routine use of these drugs cannot be recommended at the present time. In the case reported here the patient received two separate courses of melamine therapy with no diuresis.

Salt-poor Albumin.—The development of salt-poor albumin made possible a selective replacement of the primary substance which is deficient in the nephrotic patient.[10,19] Approximately sixty per cent of cases will diurese with a course of salt-poor albumin. Twenty-five to fifty grams of this substance in either a 10 or 25 per cent solution is infused slowly once a day for four days. It is well to remember that if the first two infusions fail to induce a diuresis, the third and fourth infusions should be withheld. The mechanism of diuresis is undoubtedly related to the increase in circulating plasma proteins with or without an increase in glomerular filtration rate, but with decreased tubular reabsorption of sodium.[13,15] The albumin that is infused is apparently not retained or utilized to any significant degree. Most of the injected albumin is lost in the urine and whatever remains in the body is rapidly decomposed and excreted as an added increment of non-protein nitrogen. The relative unavailability of salt-poor albumin and the prohibitive cost of commercially prepared products, together with the extremely transient effect it produces, are all factors which dampen the enthusiasm originally elicited by this form of treatment. Nonetheless, salt-poor albumin, when effective, produces a diuresis almost immediately after the first infusion, so that it is an ideal therapeutic agent with which to prepare nephrotic patients for surgery or to treat nephrotic patients during a serious acute infection. Salt-poor albumin can also be used to minimize the dangers of a subsequent course of adrenocorticotropin therapy. On the other hand, the simultaneous use of salt-poor albumin with adrenocorticotropin therapy, as was tried in the present case (Fig. 1), did not prevent the gain in weight due to the ACTH, although it is to be noted that diuresis was initiated quite early in the course of the treatment.

Measles.—Deliberate induction of measles to nephrotic patients is not without danger and therefore cannot be recommended.

Adrenocorticotropin and Cortisone.—The most consistent agent thus far found, which will induce diuresis in nephrotic patients, appears to be the adrenocorticotropic hormone.[12,17,20] Approximately 82 per cent of all nephrotic children will respond to the first course of treatment. A second course will be successful in an additional 9 per cent of cases[17] The hormone can be injected in divided doses, totaling 40 to 60 mg. per day, for eight to twelve days, after which the injections may be discontinued abruptly or rapidly decreased to a maintenance dose, as described below. Diuresis and a rapid fall in weight may occur while the injections are still being given or the desired effects may occur only after the adrenocorticotropin has been stopped or reduced to subeffective doses.

During the initial four to five days of adrenocorticotropin therapy, the nephrotic state is usually made worse, with an increase in proteinuria, edema and body weight and a rise in the blood non-protein nitrogen level. After about six to ten days of treatment, however, the patient will show a decrease in proteinuria, a slight rise in serum albumin concentration and, in one-half of the patients, a rapid onset of diuresis and a fall in weight. The other half will diurese only after ACTH is withdrawn. A superimposed infection will delay the onset of diuresis until the inflammatory process is controlled by specific antibiotic treatment. The eosinophile count should fall within forty-eight hours as an index of the physiological effect of adrenocorticotropin, but the fluctuations of the eosinophile count do not serve as an index of therapeutic efficacy.[17] The onset of diuresis appears to be related to an increase in glomerular filtration rate, an increase in plasma volume, and a decrease in urinary salt-retaining corticoids.[3,12]

The complications which accompany adrenocorticotropin therapy should be anticipated, and preventive measures taken. The latter include a low sodium, high potassium intake and antibiotic therapy.

The case reported here illustrates most of the features and complications of adrenocorticotropin therapy of nephrosis.

Cortisone has also been used to induce diuresis in nephrotic patients,[11] but apparently the frequency with which this can be accomplished is not too great.[17]

2. *Maintenance of the Relative State of Remission and the Optimal State of Nutrition*

Once diuresis is effected, the problem then becomes one of "holding the line," so to speak, keeping the edema at a minimum, and at the same time maintaining an optimal state of nutrition. A low-salt diet with the sodium content regulated between 200 and 800 mg. per day is usually required. For diets limiting the sodium to less than 400 mg. per day, special salt-free bread, salt-free butter, and

salt-free milk (Lonolac) are usually essential. Occasionally when renal insufficiency is significant the radical restriction of sodium may actually be deleterious, so that the more liberal intake of sodium, which is required, may, by necessity, cause a certain amount of edema.

Ion-exchange resins may also be used over a prolonged period of time to maintain a relative state of remission. As mentioned before, even with this form of treatment a certain amount of sodium restriction must be exercised.

For reasons not yet clear, alkaline potassium salts seem to increase the tolerance for sodium by nephrotic patients. These salts can be given as a 25 per cent potassium citrate solution in syrup, 4 to 8 ml., three times a day. It must be emphasized that potassium salts are potentially dangerous, and caution must be exercised in patients who are severely oliguric or azotemic. Direct chemical or flame photometric analysis of the plasma for potassium or an electrocardiographic study for hyperpotassemia should be made at least once during and once after the first week of therapy to determine the relative tolerance for this drug.

The maintenance of an optimal state of nutrition is also important in the treatment of nephrosis. Forcing an intake of protein over the actual metabolic needs seems hardly necessary and may even be harmful to the patient.[1] For this reason, it is important to determine from time to time the actual quantity of protein lost daily in the urine and to give additional protein in the amount of 0.75 to 1.0 gm. per kgm. of optimal body weight. A growing child should receive from 1.0 to 2.0 gm. of protein per kgm. body weight in excess of the quantity lost in the urine. Gain in weight (without increase in edema) should be obtained in a growing child. Some improvement in the serum proteins can usually be observed, but attempts to restore the concentration to normal values will often be met with failure. An adult patient can usually maintain nutrition with about 0.75 gm. of protein per kgm. body weight over and above that lost in the urine. Most of the proteins can be supplied as salt-free milk (Lonolac). Carbohydrate intake must be kept high because of its protein-sparing action. Three hundred grams per day are usually sufficient.

3. *Control and Prevention of Infection*

Nephrotic patients are extremely susceptible to infection and often a minor infection progresses rapidly to a fulminating fatal outcome. Furthermore, exacerbations of nephrotic edema often occur following an infection. For these reasons, we recommend the prophylactic ingestion of oral penicillin tablets, 200,000 to 400,000 units, two times a day. Parenteral penicillin or other antibiotics, as indicated, should be given without hesitation if an infection supervenes during a remission of nephrosis, in spite of prophylactic oral penicillin. We have also been impressed with the frequency of urinary tract infections in nephrotic patients, and active specific antibiotic treatment should be given for these complications. We feel, on the other hand, that the sulfonamides should not be given to patients with nephrosis.

The case reported here had at least one infection directly responsible for an exacerbation of symptoms.

4. *Possibility of Reversion or Suppression of the Underlying Pathological Process*

Since the exact etiology of the underlying disease process responsible for the nephrotic syndrome, whether it be glomerulonephritis, "lipoid" nephrosis, or lupus erythematosus, is not known, it is not to be expected that any of the known therapeutic agents now available will heal or even suppress the pathological process seen in the kidney. However, since spontaneous cures do occur[2] and since noticeable improvement in specific renal function tests is seen during adrenocorticotropin therapy,[3,14] it is not unreasonable to hope for the possibility of a permanent improvement. The prolonged low-dose maintenance therapy with adrenocorticotropin holds the most promise for fulfillment of this possibility. Even if the sole purpose of the adrenocorticotropin is to keep the inflammatory reaction in abeyance,[6] this form of therapy is certainly worth the trial. The suppression of the nephrotic symptoms in the patient reported here, after one and one-half years of frustrating recurrences, and the gradual improvement in the nutrition of the patient, with a steady rise in plasma protein concentrations to normal during the last four months of continuous adrenocorticotropin and penicillin therapy, attest to the possible value of this form of management.

Summary

A typical case of nephrosis in a fifteen-year-old boy treated with various forms of therapy is pre-

sented. Relative merits and demerits of these forms of therapy are discussed in relation to the four objectives of treatment: (1) elimination of edema, (2) maintenance of remission and nutrition, (3) control and prevention of infection, and (4) possible reversion and suppression of the underlying pathological disorder.

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ARMY SURGEON GENERAL REPORTS 85 PER CENT KOREA WOUNDED RETURNED TO DUTY

At least 85 per cent of U. S. troops wounded in Korea are being returned to active duty within an average of three months, according to Maj. Gen. George E. Armstrong, Army Surgeon General. He made a report at a special press conference in the Pentagon Building, called to correct what he said was the public impression that Korean casualties represented "a complete loss to the United States."

Gen. Armstrong placed total U. S. casualties in the neighborhood of 100,000 including 16,500 killed in action, 12,000 missing and 71,500 wounded. In the latter category, he said 62,500 have returned to duty, 4,500 are remaining in Army hospitals, 3,000 have been discharged for disability and 1,500 have died of wounds.

He said the rate of death of the wounded was 2.4 per cent, the lowest in any war, and he attributed this to fast evacuation from the front lines and early surgery. Gen. Armstrong had high praise for newly developed body armor.

Simultaneous with the Surgeon General's report, the Defense Department asked Selective Service to deliver 544 physicians for the armed services in January. The Army has asked for 344 and the Air Force for 200. The Department said that since July, 1951, the total physicians called to duty under the Doctor-Draft Law is 3,238.

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The Surgical Treatment of Mitral Stenosis

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SINCE March 31, 1950, forty-seven patients have been accepted for surgical treatment of the mitral valve. It was planned to correct the stenosis by the method of Bailey and his associates[1] which is commonly referred to as "commissurotomy." This involves inspection of the valve by palpation with the forefinger passed into the left auricle through the appendage and an attempt to widen the orifice by cutting with an appropriate instrument at the angles or commissures without sacrifice of valve leaflet structure, thus avoiding the production or augmentation of regurgitation. Experience has shown that it is possible to split apart some of the valve cusps by manipulation with the finger alone. This method has been advocated by Harken[3] and by Brock.[2] It is of interest that a successful "finger fracture" by a method identical with that in use today was reported by Souttar[8] of Great Britain in 1925. It is difficult to explain why this brilliant lead was not pursued further immediately. Instead, for almost twenty-five years, surgeons tried to relieve mitral stenosis by cutting out pieces of valve leaflets with valvulotomes inserted through the left ventricle. Naturally, these operations were almost universally unsuccessful because of the regurgitation produced.

In a previous communication,[4] I reported the results of the first nineteen patients operated on in the Henry Ford Hospital. There were five postoperative deaths, three of which were clearly due to errors in diagnosis since the lesions in the valves were predominantly regurgitation rather than stenosis. The other two deaths were due at least in part to technical errors. During the operation on one of these patients, the ratchet broke off the guillotine making it impossible to divide the commissures satisfactorily. In the other patient, finger fracture of the medial commissure was complicated by a tear across the base of the posterior leaflet. Both of these patients had advanced pulmonary fibrosis as a result of long standing pulmonary hypertension.

There have been only two hospital deaths in the last twenty-eight patients. In one of these patients, there was a gross error in case selection, the lesion being that of endocardial fibroelastosis[7] with incompetence of the mitral valve rather than stenosis. In the other patient, a ventricular wound was made with the knife during an attempt to cut the medial commissure, and following suture of this, the heart could not be resuscitated.

Thus, there have been seven operative deaths in the series of forty-seven patients. To this must be added three deaths in patients who were discharged from the hospital. One patient with a good technical commissurotomy showed evidence of brain damage after the operation. This was probably due to embolism but could also have been the result of a prolonged period of hypotension occurring after moderate blood loss. As a result of this experience, certain modifications have been made in the operative technique to improve the hemostasis. Another patient with marked preoperative regurgitation was temporarily improved but expired six months later. A patient with pure mitral stenosis died two months after a supposedly successful finger fracture; autopsy showed that the stenosis had recurred and that there was evidence of fresh inflammation in the valve. It is believed that a more radical commissurotomy with the knife would have yielded a better result. Of the thirty-seven living patients, two are unimproved; the others are considered to have good or excellent results.

The ages of the patients accepted for commissurotomy fell itno the following groups: twenty to twenty-nine years, ten cases; thirty to thirty-nine years, eighteen cases; forty to forty-nine years, eighteen cases; over fifty years, one patient (aged fifty-three). There were thirty-five females and twelve males. Only twenty patients gave a definite history of rheumatic fever. All had many of the disabling symptoms of mitral heart disease, including shortness of breath, orthopnea and marked decrease in the ability to do work. Thirty-five had had attacks of pulmonary edema, and in twenty-two of these, there had also been hemoptysis. Twenty-three patients showed auricular fibrillation at the time of operation. All had a more or less typical diastolic rumble at the apex. Fourteen had a systolic murmur at the apex of grade two or better, and in five of these, serious regurgitation

From the Division of General Surgery at the Henry Ford Hospital, Detroit.

Read at the Michigan Clinical Institute, Detroit, March 14, 1952.

was encountered. Fluoroscopic examination in most instances showed a picture typical of mitral stenosis, with enlargement of the pulmonary conus, left auricle and right ventricle. Three of the deaths occurred among five patients with evidence of hypertrophy of the left ventricle. In many of the patients the pulmonary artery pressure was determined by cardiac catheterization; the mean pressures varied from 40 to 124 cm. of water.

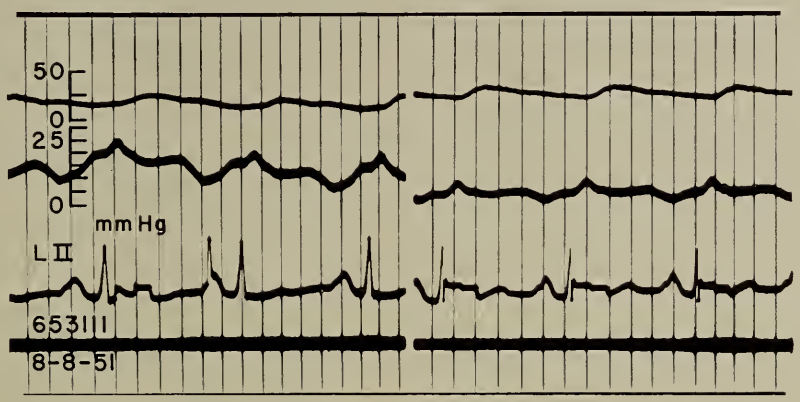


Fig. 1. Oscillograph tracings (Hathaway apparatus) made during operation for mitral stenosis. Record on left is before the commissurotomy, that on the right is after. The upper tracings are from the pulmonary artery, the middle, from the left auricle, and the lower, from Lead 2 of the electrocardiogram. The pulmonary artery pressure was not high at the beginning and did not change, but there was a significant fall in left auricular pressure.

The presence of important mitral regurgitation has been the commonest contraindication to operation. This has been recognized by the finding of an apical systolic murmur transmitted well into the axilla, marked enlargement of the left auricle and left ventricular hypertrophy. Except in one instance, the presence of aortic valve disease has been considered a contraindication. The exception was a case of mild aortic stenosis, who was improved by commissurotomy for mitral stenosis of severe grade. No patient who exhibited marked heaving of the precordium has survived the operation. Apparently this sign is indicative of left ventricular hypertrophy and valvular pathology other than mitral stenosis. The electrocardiographic findings have also been valuable in indicating the side and degree of ventricular hypertrophy.

In the first thirty-eight operations, the pulse patterns of the left auricle and pulmonary artery before and after the incisions into the stenotic valves were studied. An impedance gauging system developed for recording biologic pressure variables (Hathaway system) was used to obtain the pressure tracings. A detailed study of the oscillograph tracings of twelve patients has been published by Dr. Edward R. Munnell (Fellow of the Michigan Heart Association) and me.[6] We have been able to demonstrate a wave form which is typical of pure mitral stenosis, and after a satisfactory commissurotomy, this wave form is changed to one approximating the normal. An example of the records obtained during a successful operation is shown in Figure 1. In other records, the presence of important regurgitation has been indicated by an increase in auricular pressure synchronous with ventricular systole.



Fig. 2. Six-fingered glove to prevent hemorrhage during commissurotomy. The glove was designed and made by Dr. Edward R. Munnell.

The operative technique has been essentially that described by Bailey and his associates. I have continued to use an anterior approach through the bed of the resected third rib, with transection of

the second and fourth costal cartilages. In the last twenty cases, I have used a modified rubber glove with six fingers to prevent hemorrhage when a guillotine is inserted into the auricle with the forefinger (Fig. 2). This was constructed at the suggestion of Dr. Munnell.[5] The added finger, which is attached in the region of the thenar eminence, serves as a tunnel through which the knife can be inserted and to the end of which a tight ligature can be applied. Advancement of the instrument through the glove results in effortless telescoping of the finger. During the actual commissurotomy, this outer glove becomes distended with blood but none escapes.

The methods of opening the valves in the forty-seven patients have been as follows. In fifteen, the principal cut was in the lateral commissure, in eleven it was medially placed, and in five, incisions were made into both commissures. The finger alone was used in sixteen patients, or approximately one-third of the series. After seeing the valve of one patient at postmortem examination, after a supposedly successful finger fracture, and after observing several patients who are only slightly improved after the same procedure, I have come to the conclusion that more definite relief of the stenosis by instrumental incision is indicated even though there is more risk of producing some degree of regurgitation.

Summary

The results of forty-seven operations on patients with mitral valve disease have been presented. With the present technical state of the operation, a mortality of less than 10 per cent is to be expected. Proper case selection is an important factor in keeping the mortality rate low. Serious mitral regurgitation is the commonest contraindication.

Addendum

Since this report was presented, thirty-five additional patients have had the operation of mitral commissurotomy, with two postoperative deaths.

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DIAGNOSIS OF HEART DISEASE

(Continued from Page 40)

of patent ductus was made for the first time in my office. They had been seen by many physicians. That they should live twenty-five years and thirty-seven years, respectively, before a diagnosis of patent ductus was made is almost unbelievable. The murmurs were there; they had been there since these people were born, but still somebody did not listen carefully enough to hear the diastolic component. They probably heard the basal systolic murmur, but if they had been a little more careful in their auscultation, especially listening during a held expiration, they could have heard a continuous murmur. The diastolic component was not very loud, but it was there. The second one of these two had subacute bacterial endocarditis, too. They were both operated on and were cured.

You can see from this somewhat rambling talk that there is a great deal that we can pick up by the use of our senses and the stethoscope and the simple tools we all carry with us that can solve most of the diagnostic problems of heart disease. There will remain a group that you cannot solve, that nobody can without more elaborate study. They will have to be hospitalized. They are the ones who will require catheterization studies at times, electrocardiograms, measurements of circulatory dynamics, x-rays, et cetera. The rare case of pericardial constriction or the puzzling case of congenital heart disease will then be discovered. Although there remains, therefore, a residue that will need hospital studies, the great majority of these cases, I am sure, can be solved in our offices or in the patient's home if we apply the simple clinical methods that are available to all of us.

270 Commonwealth Avenue

Current Treatment of Rheumatic Fever

By Manes S. Hecht, M.D., Anthony Nolke, M.D., and Warren E. Shelden, M.D.

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THE TREATMENT of rheumatic fever, largely empirical in origin, has some rationality when related to the concept of the disease which can be briefly stated as follows:

Rheumatic fever may be regarded as a disease of tissue hypersensitivity, brought on by beta hemolytic streptococcic infections in susceptible individuals. Hereditary factors may play a part in susceptibility to rheumatic fever. The tissue reactions which occur in active phases of the disease apparently serve no useful purpose, but on the contrary are harmful. Affected persons exhibit definite but variable tendencies to recover, and decreasing susceptibility to recurrence with the passage of years.

Based on this concept of the disease, therapeutic measures fall into three groups.

1. Supportive measures
2. Anti-streptoccic measures
3. Suppressive measures

So far as we know, none of our therapeutic agents alter the inherent susceptibility of the individual to react to streptococcic infections by developing rheumatic fever. It may therefore be said that we have no true cure for the disease.

The supportive measures are numerous and varied. Among them are included treatment of cardiac failure, bed rest during active phases of the disease, regulation of the convalescent period, and maintenance of the patient's education, training, and morale so that he will be able to lead a useful life within the limitations set by his disabilities.

Anti-streptococcic measures consist of early vigorous treatment of recognized or suspected streptococcic infection, eradication of streptocci present at the time of an attack of rheumatic fever, and prophylaxis against streptococcic infection. The latter ideally should include correction of unhygienic living conditions and deficient diet as well as drug prophylaxis. Drug prophylaxis, using sulfadiazine 0.5 gm. twice daily or penicillin 100,000 units three times daily is recommended only for known rheumatics. Attempts to actively immunize by means of streptococcus vaccine or Dick Toxin are of no value in preventing rheumatic fever.

By suppressive measures is meant the use of drugs of hormones to suppress the unwanted tissue reactions which occur during the active stage of rheumatic fever. The salicylates as well as cortisone and corticotropin seem to act in this way.

There has been much controversy over the merits of salicylate therapy in rheumatic fever. At the Children's Hospital of Michigan it has been our opinion that salicylates are of definite value in active rheumatic fever, but they are obviously much weaker anti-rheumatic agents than cortisone or corticotropin, and they are not without toxicity in optimal dosage. When we elect salicylate therapy we usually administer aspirin, gr. ¾ per pound per day, sometimes gr. 1 per pound per day if that much is tolerated by the patient. Salicylate intoxication is not uncommon at the latter dosage level. Close observation of the patient and determination of salicylate blood levels are imperative if dangerous reactions are to be avoided.

Hench of the Mayo Clinic first reported the use of cortisone and corticotropin in the treatment of rheumatic fever in 1949.[3] Since then there have been a number of excellent reports.[4,6] That the hormones are useful anti-rheumatic agents would seem to be obvious. Details as to when and how best to employ them are not yet established. A final evaluation of their impact on the overall picture of rheumatic fever will require years of observation.

At Children's Hospital of Michigan we first used the hormones in treatment of rheumatic fever in April, 1950. At first we were very conservative, treating only a few critically ill children who had not responded to conventional therapy. The results were such that we soon began to use cortisone or corticotropin in severe cases without delay, using aspirin first in less severe cases. More recently we have treated with hormones almost all patients with demonstrably active carditis, unless there has been some contraindication such as tuberculosis or other concurrent infection.

Based on a talk by Manes S. Hecht, M.D., on the 3rd Annual Michigan Heart Day, at Postgraduate Clinical Institute, March 14, 1952.

This study was aided by a grant from the Michigan Heart Association.

A substantial portion of the Cortisone used was contributed by Merck & Co. Inc.

The following is an analysis of those hormone-treated cases of rheumatic fever, forty-four in number, in which we have a follow-up of at least six months. During the period covered, approximately half of the patients diagnosed as having active rheumatic fever were treated with cortisone or corticotropin. No analysis of the cases not receiving hormone will be made here, except to state that those patients in whom no active carditis could be demonstrated at the time of admission all made excellent recoveries on salicylate therapy.

TABLE I.

White Male	13
White Female	17
Colored Male	4
Colored Female	10
TOTAL CASES	44
Age	
3 years	2
4 years	3
5 years	3
6 years	4
7 years	7
8 years	6
9 years	6
10 years	3
11 years	9
12 years	1

TABLE II.

First Attack	30
Second Attack	10
Third Attack (or more)	4

TABLE III. ESTIMATED DURATION OF ATTACK BEFORE TREATMENT

1 Week or less	9
1-2 Weeks	11
2 Weeks to 1 Month	9
1 to 2 Months	9
More than 2 Months	3
Unknown	3

Most of these patients were in their first attack. It is probable that some have had earlier attacks of which we would obtain no history. There was considerable variation in the duration of attacks before treatment.

TABLE IV. CARDIAC STATUS

Decompensated	15
Cardiac Enlargement	21
Valve Lesions	37
EKG Abnormalities	38
Pericarditis	4
TOTAL CASES	44

Approximately one third of these patients were in cardiac failure when treatment was instituted. Almost half had enlarged hearts as measured by teleroentgenogram. Thirty-seven of the forty-four had physical signs indicating valvular lesions, mostly of the mitral valve. Thirty-five had electrocardiographic abnormalities elicited by serial electrocardiograms. All had markedly accelerated erythrocyte sedimentation rates, four had acute pericarditis, two had subcutaneous nodules.

Treatment

Because of the great variability of attacks of rheumatic fever we did not set a definite course of treatment for all patients but have tried to adjust dosage and duration of therapy to individual needs. Some early cases received suboptimal dosage. We now start with 300 mg. of cortisone or 100 units of corticotropin for the first twenty-four hours in most cases, reducing the amount step-wise to a maintenance dose which is usually 100 mg. of cortisone or 40 units of corticotropin. The speed with which the dosage is reduced varies according to the severity of the attack and the response of the patient. Ordinarily it takes two weeks to reach maintenance levels. The daily dose of either hormone is divided into four parts given at six-hour intervals. We now use cortisone by mouth only. We have used corticotropin only in the fluid form intramuscularly. Roughly equal numbers have been treated with each hormone. At times we begin treatment with corticotropin but change to cortisone for maintenance.

All rheumatic fever patients are given a three-day course of intramuscular penicillin on admission. Recently penicillin has been administered orally 100,000 units four times daily as prophylaxis throughout the remainder of the hospital stay. Patients receiving cortisone or corticotropin receive low salt diets and supplemental potassium salts, such as potassium acetate 1.0 gm. three times daily. Decompensated patients are kept in oxygen tents, are given mercurial diuretics and are digitalized.

The duration of treatment varies greatly. Ideally one would like to suppress the rheumatic activity until full recovery has taken place. We do not have the means of detecting this end point. In some cases, the total duration of the attack is so long that there may be more danger from prolonged hormone therapy than from low grade rheumatic activity. Our figures for duration of therapy reflect considerable trial and error. In general, six weeks of treatment, plus a tapering off period of one to two weeks is adequate for most cases. Some do well with less, others require more. Patients who need longer courses fall into three groups—the fulminating cases, those patients who

have been ill for weeks before treatment and have shown little tendency to improve spontaneously, and those patients whose response to the usual dosage of hormone is slow. We have not been satisfied with the results of treatment for less than a month in patients with active carditis.

After cessation of hormone administration our patients are kept on complete bed rest for at least two weeks and thereafter until we feel convinced that there will be no relapse. After this their physical activity is increased slowly, step by step. The time required for return to normal activity varies with the severity of the attack. Sulfadiazine prophylaxis is used during convalescence and will be continued for several years.

TABLE V.

Deaths	2
Increase in Heart Size	2
New Valve Lesion During Treatment	1
New Valve Lesion During Relapse	1
Serious Relapse post Treatment	5
Minor Activity post Treatment	15
Decrease in Heart Size	14
Disappearance of Signs of Valve Lesions	4
Improvement in EKG	35

Results

Patients with rheumatic fever of moderate severity respond dramatically to corticotropin or cortisone. The severely ill respond slowly. Fever, joint signs and symptoms, rashes and pericardial friction rubs disappear with remarkable rapidity. Improvement in heart tones and disappearance of gallop rhythm are slower, varying with the severity of the carditis. The low pitched mid-diastolic murmurs often heard during active carditis frequently disappear. Well transmitted apical systolic murmurs seldom disappear, but do change in quality and intensity. Dramatic change in heart size occurs only where there has been pericarditis; small decreases in heart size, probably representing disappearance of dilatation are not infrequent. In this series one minimal aortic lesion was first recognized during treatment, and one new mitral lesion became manifest during relapse after termination of a two-week course of cortisone. Two hearts became slightly larger in relative size.

As to laboratory findings, in most instances sedimentation rates and electrocardiograms became normal within three weeks of institution of hormone therapy. Hemoglobin usually rises to normal levels in three or four weeks without transfusions or medicinal iron.

There were two deaths. One was a five-year-old girl who was in extreme cardiac failure on admission. She improved but never established cardiac compensation and died in failure six months later. The second was a ten-year-old with a very atypical history. She was known to have arrested tuberculosis. A review of her films revealed cardiac enlargement of at least three months' duration. On admission this child was in cardiac failure, had a very enlarged heart with a well-transmitted apical systolic murmur, and fever. During the first forty-eight hours in the hospital her course was so adverse that it was felt that the danger of hormonal therapy as related to her healed tuberculosis was less than the danger to her life from the current illness. She improved on corticotropin but still had an elevated sedimentation rate and prolonged p-r interval when she died suddenly about one month after admission. It is possible that this death was related to the treatment. Permission for autopsy was not obtained.

Relapses have been divided into two groups—serious relapses, during which there was some evidence of increased cardiac damage, and minor relapses which consisted of temporary increases in sedimentation rates or adverse electrocardiographic changes or both. This latter group is hard to differentiate from so-called post hormonal "rebound" or "flare."

There were five serious relapses. Of these, two were obviously undertreated, having received only two weeks or less of hormone therapy. The third was precipitated by acute tonsillitis which occurred shortly after treatment had been stopped. Of the remaining two, one was a very severely ill boy who probably would have died without hormonal treatbent, and who continued to have evidence of low grade rheumatic activity for a long time after cortisone was discontinued. The fifth patient was a girl whose attack had been going on several weeks before treatment was started and whose response to cortisone was slow. Evidence of low grade activity lasted about two months after cessation of treatment and the heart enlarged slightly.

The fifteen patients who were considered to have minor activity after cessation of hormone treatment all improved spontaneously with no increases in heart size or fresh valvular involvement.

Of the so-called side effects of cortisone or corticotropin only two, euphoria and salt and water retentions were really troublesome. Because of euphoria, many children were difficult to keep quiet at times when their cardiac status indicated maxi-

mum rest. The tendency to fluid retention complicates the handling of decompensated patients but judicious use of mercurial diuretics overcomes this difficulty. We ignored moon face, striae and acne. There was never a serious degree of either hypertension or glycosuria. One patient had abscesses at the site of corticotropin injections, one had furuncles which responded to penicillin. One patient came down with mumps and another with chicken pox while under treatment. The hormones were discontinued temporarily in these instances. The courses of both concurrent infections were typical.

It is probable that some few lives were saved among the group of fifteen patients admitted in cardiac failure. More striking is the fact that there was very little evidence of increase in cardiac damage after institution of treatment in the surviving patients.

There was no conclusive difference in the results of one hormone as compared with the other, but the advantages of oral medication are obvious.

Cases of chorea have not been included in this report. We have treated only a few such patients with hormones and have not observed any strikingly beneficial effects.

Discussion

Among these forty-four cases, there are twelve in which the response to salicylates was inadequate, and that to hormone striking. Cortisone and corticotropin are obviously much more potent antirheumatic agents than the salicylates. In our experience, patients who did not have demonstrably active carditis did so well on salicylate therapy that we have not felt it necessary to use hormones in such cases. Many patients with mild carditis would probably do as well on salicylates as on the hormones. This does not mean that the physician is never justified in using cortisone or corticotropin unless cardiac involvement is obvious. It does mean that he need not feel impelled to rush into hormonal treatment before diagnosis of rheumatic fever is established, and that in the less severe cases he has a choice of therapeutic agents. Severity of rheumatic fever is to be judged in terms of cardiac involvement, not joint involvement or fever. In severe attacks of rheumatic fever cardiac damage occurs early and is readily demonstrable. Whether salicylate or hormonal treatment is elected, close observation of the patient is essential, not only during treatment but also during convalescence.

Summary

The treatment of rheumatic fever as carried out at the Children's Hospital of Michigan has been outlined, with emphasis on the use of cortisone and corticotropin.

Results of hormonal treatment of 44 patients have been tabulated.

Cortisone and corticotropin are useful aids to the treatment of rheumatic fever, especially in its more severe forms.

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THE APPORTIONMENT OF OUR LIVES

According to a study made by the University of Wisconsin psychology class, if you live to be seventy, you will have spent one year on the telephone; about twenty years sleeping; two months signing pay checks for twenty solid years of work done; five years shaving and dressing; five months tying shoes; two and a half years smoking; seven years in sports and three years just waiting on something or somebody. They don't say where you will have spent the rest of your time. Neither do we attempt to say, but we ponder sadly on the possibility that we might have amounted to something if we hadn't slept so much.—*Battle Creek Kiwanis News Letter.*

Studies with the Flicker Photometer

By Donald C. Overy, M.D.
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IN 1950 Krasno and Ivy[4] first proposed the use of an instrument called the flicker photometer as an aid in the diagnosis of coronary artery disease. It was felt that if used properly this instrument not only would help in the differential diagnosis of patients with atypical chest pain but also would serve to pick out those individuals who might later develop serious degenerative heart disease. It was postulated by Krasno and Ivy that nitroglycerine would appreciably change this threshold of light fusion in a particular manner indicative of the nature of the patient's vascular system. They theorized that in hypertension, for example, anatomic changes in the retinal arteries are always preceded by vasospasm and that nitroglycerine administered to such a subject would result in an increased supply of oxygen to the retina and consequently raise the flicker fusion threshold. Conversely, with normal retinal arterioles it was postulated that nitroglycerine would cause sufficient dilatation of the vessels to induce passive congestion of the retinæ and result in a decrease in the flicker fusion threshold. On the basis of these differences, therefore, it was felt that the test could be used to indicate or to predict a vasospastic element present in the retinal arterioles which might parallel a similar condition of the coronary vessels.

The instrument devised by these workers for determining the threshold of light fusion consists of a stable electronic oscillator driving a synchronous motor which rotates a hollow metal cylinder with a window on one side. A small incandescent lamp inside the cylinder thus gives a flashing light which is thrown on a small ground glass window.

Our studies with the flicker photometer may be divided into two parts. The first were concerned with the accuracy of the instrument itself, and tests were carried out to see whether the calibration of the dial in flashes of light per minute was correct and to be sure that a given setting of the dial would always give flashes at the same rate. The second part of the work was devoted to studies on sixty-seven normal subjects and eleven patients with coronary artery disease, carried out according to the technique described by Krasno and Ivy.

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The material in this paper was presented briefly at a panel discussion on the use of the flicker photometer at the annual meeting of the Michigan Heart Association on March 14, 1952.

Methods

To test the adequacy of the flicker photometer itself, a suitable photocell was placed close to the ground glass window and the amplified output of the cell was compared with that of a Hewlett-Packard 201B low frequency oscillator and the 60-cycle AC power line by means of a cathode ray oscillograph.

The method originally described by Krasno and Ivy was followed in all of the tests done on normal subjects and on patients. Care was exercised to thoroughly instruct the subjects under test to respond promptly at the first evidence of flickering as the frequency of flickering was decreased. Several determinations were made prior to the administration of nitroglycerine in order that the patient become familiar with the method employed and in order that an accurate base line determination was obtained prior to the use of the medication. Following the determination of the average fusion threshold nitroglycerine was administered in the form of a sublingual tablet (0.0004 gm.), and the fusion threshold was determined at two, four and six minute intervals following administration of the tablet. An average fall of the fusion threshold of 60 cycles or more per minute was considered to be a significant alteration from the base line determination and was interpreted as a normal response, An average rise of the fusion threshold of 60 cycles or more per minute was considered to be a significantly positive test and to suggest the probability of vasospastic disease of the coronary arteries. In those individuals in whom the fusion threshold was unaltered from this range of 60 cycles or more per minute after the administration of nitroglycerine, a second tablet was given under the same conditions, and subsequent determinations were made. If there was still no significant alteration from the base line determination the test was considered to be negative. The distance of the patient from the machine and the lighting conditions of the room were kept constant at all times during each deter-

TABLE I. STUDIES WITH THE FLICKER PHOTOMETER

	No.	Threshold		
		Lowered	Unchanged	Elevated
Medical students	46	23(50%)	20(43%)	3(7%)
Student nurses	15	9(60%)	5(33%)	1(7%)
House staff	6	1(17%)	5(83%)	0
Recent infarction	8	2(25%)	6(75%)	0
Angina pectoris	3	0	3(100%)	0
Totals				
Normal subjects	67	33(49%)	30(45%)	4(6%)
Coronary disease	11	2(18%)	9(82%)	0

mination. Subjects were instructed not to smoke for at least two hours prior to the test. If for any reason a test was considered to be unsatisfactory or if the base line readings were inconstant, the data was not included in the present study.

Results

The results of the tests done to find out whether the photometer itself was a good instrument and adequate to study flicker fusion phenomena accurately may be summarized very quickly. Studies comparing the frequency of light flashes of the photometer with the 60-cycle AC line voltage were considered more accurate than comparisons with the low frequency oscillator, and these indicated that the instrument was quite satisfactory. In the central part of the dial the accuracy of the flashes was nearly perfect, and at the lowest and highest frequencies an error of not over 3 per cent was found. Furthermore, the frequency of the flashes for a given dial setting was constant from one time to another.

Table I summarizes the results of the flicker fusion tests in the entire group that we studied. Of the forty-six normal medical students, twenty showed no significant alteration of the flicker fusion threshold, even after the administration of a second nitroglycerine tablet. Twenty-three medical students showed a decrease of 60 cycles or more per minute following the administration of nitroglycerine, which has been described as the usual normal response. The remaining three individuals had distinctly abnormal responses with a rise of the fusion threshold 60 cycles or more per minute. A similar division was noted among the student nurses. Five nurses showed no significant change in the fusion threshold, while nine had a significant decrease in the fusion threshold. Only one of this group had a significantly positive test. Of the six house staff none had positive tests, and only one had a significant lowering of his fusion threshold. In summary, of the sixty-seven normal subjects slightly less than half of them (thirty) had no change after nitroglycerine, while thirty-three had a lowering of the fusion threshold. Four individuals had positive tests.

Of the eight patients with recent myocardial infarction (within the preceding six weeks), six had no change in the fusion threshold, and two had a lowering of this threshold. No one in this group had a positive flicker test. Three patients with definite angina pectoris, but without previous myocardial infarction, showed no alteration in the flicker fusion threshold, despite the administration of a second nitroglycerine. There was no one with a positive test in this entire group.

Discussion

It is quite apparent that these data do not support the claims of Krasno and Ivy relative to the diagnostic value of the flicker test. Although only a small percentage of positive tests was discovered among normal subjects, nearly half of this group failed to show any significant alteration of the fusion threshold after the administration of a second nitroglycerine tablet. Even more significant is the fact that none of the patients who had definite known coronary artery disease were found to have positive flicker fusion tests. Similar results have been reported by Fox and Wright,[2] Russek, Anderson and Doerner,[5] and by Keys and Simonson.[3] A study on a large group of young normal subjects by Chambers and Kozonis[1] showed a rather large number of positive tests initially, but when the individuals with positive tests were subsequently given another examination many of them were negative.

Sufficient evidence has been accumulated to make it quite clear that the nitroglycerine-flicker test has no place in the diagnosis of degenerative heart disease. To use the method for this purpose and especially to employ it for the recognition of early cardiac involvement will do far more harm than good. Grave doubts regarding the usefulness of the test in estimating spasm of the retinal arteries has been raised, but even if the test is a good one for this purpose, it is not justifiable to assume that spasm of arteries in the eye has any clear relationship to the condition of the coronary arteries.

(Continued on Page 83)

Metastatic Sarcoma of the Heart Diagnosed Antemortem

By Thomas N. James, M.D.
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INVOLVEMENT of the heart by malignant neoplastic disease is more common than generally supposed. In an accumulated series of 8,414 autopsies performed on patients dying of cancer, Prichard[5] calculated that there were 3.9 per cent cardiac metastases. Carcinoma of the breast, carcinoma of the lung, sarcoma of the lymphatic system and melanoma of the skin accounted for almost half of these metastases, the other half arising in scattered foci.

Approximately 500 secondary tumors of the heart have been reported in the world literature; twenty of these were diagnosed antemortem. Primary tumors of the heart are less common, about 113 having been reported. Of these, five have been diagnosed *in vivo*. The cell type of primary tumors has varied widely but the two commonest have been myxoma and sarcoma (of various origin). Some of these primary tumors were tiny fibromatous nodules on the septum or valves and were of no clinical significance. Of the 100 cases summarized by Whorton[7] as primary tumors of the heart, forty-seven had metastases to organs other than the pericardium, most often to the lung. Considering the primitive cell type (e.g. "round-cell," "pleomorphic," et cetera) of most of these forty-seven tumors, it is difficult not to believe that some of these "primary" tumors were actually metastases.

The fact that so few cardiac tumors have been diagnosed antemortem has prompted many authors to attribute such diagnosis to fortuitous circumstances and luck. Although pathognomonic criteria are not available, diagnosis by exclusion is feasible and, as pointed out by Yater,[8] the principal requirement is that the condition be considered. With the technique of cardiac surgery improving so remarkably in recent years, and with artificial heart-lung preparations almost a present reality, the diagnosis of cardiac tumors has assumed more than an academic interest.

Means by which this diagnosis may be derived have been discussed by Yater,[8] and more recently, by Doane and Pressman.[1] To avoid unnecessary repetition, the clinical features suggested by them and others[6] will be listed without discussion:

1. Sudden onset of cardiac failure, often intractable and with no other explanation for heart disease.
2. Unexplained pericardial effusion, which may contain malignant cells.
3. Postural alteration in murmurs; postural syncope; when murmurs or syncope exist without apparent explanation.
4. Bizarre x-ray appearance of the cardiac silhouette.
5. Cardiac arrhythmias without apparent cause, refractory to usual therapy, and varying in type.
6. Presence of malignancy elsewhere with new findings of cardiac disease.
7. Embolic phenomena with sterile blood cultures and no evidence of thrombosis.

Within the past few years, technical procedures which will assist in such a diagnosis have been discussed. Lubschitz[3] and his associates reported a case in which the diagnosis was suggested by the bizarre x-ray appearance of the heart after pericardial paracentesis with insufflation of air. Doane[1] emphasizes the importance of the presence of a fixed right cardiac border in fluoroscopy. Malignant cells seen in Papanicolaou smears of pericardial fluid have been reported by several authors. Mahaim[4] suggests the value of angiocardiography, especially in suspected myxomas (the commonest primary cardiac tumor), since this particular tumor is almost always pedunculated and is highly vascular; no one has so far reported clinical experience with this procedure in cardiac tumors.

The case herein reported is one of a sarcoma metastatic from the uterus to the cavity of the right ventricle. Although eight cases of carcinoma of the uterus metastasizing to the heart have been reported, none of these was diagnosed *in vivo*. No case of sarcoma so metastasizing has been reported as antemortem or postmortem diagnosis.[2]

Case Report

Case 1.—H. A., was a fifty-eight-year-old housewife with two children. Menopause had occurred at the age of fifty-two and was not remarkable. She was first seen, regarding right lower quadrant pain, in the Gynecology

From the Division of Cardiology of the Henry Ford Hospital, Detroit, Michigan.

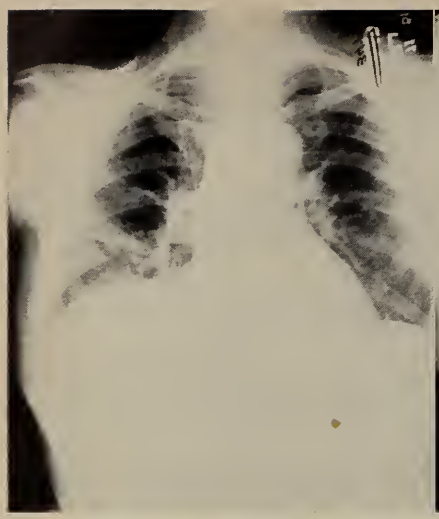


Fig. 1. Chest x-ray October 11, 1951. Plate-shaped atelectasis in the right base with pneumonitis above it. Cardiac silhouette within normal limits.

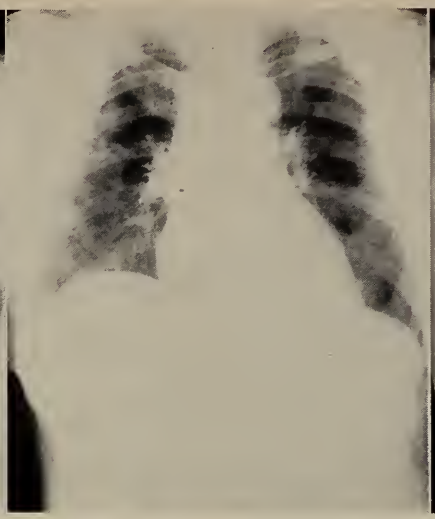


Fig. 2. Chest x-ray April 29, 1952. Atelectasis gone. Heart is larger and some bulge is apparent in the upper half of the right border.



Fig. 3. Chest x-ray May 13, 1952. Straightening of the left heart border; generalized cardiac enlargement; upper right border markedly bulging.

Clinic on September 11, 1951. The pain had been present for six months and was progressively increasing. The temperature was 99.6 F. Examination revealed a tumor the size of a four-month pregnancy in the right lower quadrant; no murmurs were heard on cardiac auscultation. Intravenous pyelograms showed a calcified mass in the right lower quadrant. Photofluorogram of the chest was normal; x-rays of the pelvis and lumbosacral spine demonstrated the previously mentioned pelvic calcification and slight hypertrophic arthritis.

Since the pain persisted, she was admitted to the hospital, September 15. That day one observer heard a soft apical systolic murmur which was not transmitted. Four days later, another observer was unable to hear any murmurs. The blood pressure the day of admission was 122/84 mm. Hg. The Kline exclusion test was negative. Proctoscopic examination and barium enema were normal, as were x-rays of the stomach. Blood count September 18, was as follows: hemoglobin of 11.1 gm.; red blood count, 3.6 million; white blood count, 7,100 with 82 per cent polymorphonuclears, 1 per cent eosinophils and 17 per cent lymphocytes. Urinalysis was normal. Cholecystograms revealed cholelithiasis. Following reexamination in the gynecology department, hysterectomy was advised.

On September 21, the sixth hospital day, a total hysterectomy with bilateral salpingo-oöphorectomy and appendectomy was performed. The fibroid on gross section resembled sarcoma and the histopathological report was highly anaplastic leiomyosarcoma with extensive necrosis. The postoperative course was marked by general malaise, weakness and nausea. Chest x-ray the twenty-sixth hospital day demonstrated several areas of plate-shaped atelectasis in the right base with pneumonitis above them. Throughout the hospitalization, the pation maintained a low grade fever which did not respond to antibiotics. Just prior to discharge on the twenty-ninth hospital day, a small firm mass the size of a golf ball was palpable just above and to the right of the umbilicus.

When the abdominal mass persisted, she was advised to have a cholecystectomy and re-entered the hospital on April 8, 1952. The next day she was seen for a routine preoperative cardiological consultation. A gruff grade II systolic murmur was transmitted from the xiphoid up along the left sternal border to the pulmonic area. The hemogram was as follows: hemoglobin, 10.6 gm., red blood count, 3.61 million; white blood count, 11,350 with 87 per cent polymorphonuclears, eosinophils 1 per cent and 12 per cent lymphocytes; urinalysis showed a faint trace of albumin but was not otherwise remarkable. Chest x-ray was negative for evidence of metastasis to the lungs or ribs but the heart was enlarged. The electrocardiogram, the second hospital day, demonstrated early right ventricular hypertrophy (Fig. 4). At that time two possible diagnoses were entertained: subacute bacterial endocarditis (the low grade fever had persisted) and metastatic involvement of the right side of the heart. Seven venous and one arterial blood cultures were obtained and were all sterile, whereupon the chief consideration became secondary cardiac tumor. The hematocrit was 35 mm. and the corrected sedimentation rate 43 mm./hr. (Wintrobe).

On the seventh hospital day, a laparotomy was performed and the gall bladder, containing a 2 cm. mulberry stone, was removed. The palpable tumor proved to be metastatic sarcoma of the abdominal wall histopathologically identical to the primary tumor. During the operation, the patient received two 500 cc. transfusions of whole blood, and eleven days postoperatively, the hemogram showed sustained improvement: hemoglobin, 14.4 gm.; red blood count, 4.02 million; white blood count, 13,500, with 80 per cent polymorphonuclears, 20 per cent lymphocytes. Progress chest x-ray April 29, two weeks postoperatively, revealed increase in heart size, especially on the right (Fig. 2). The same day she be-

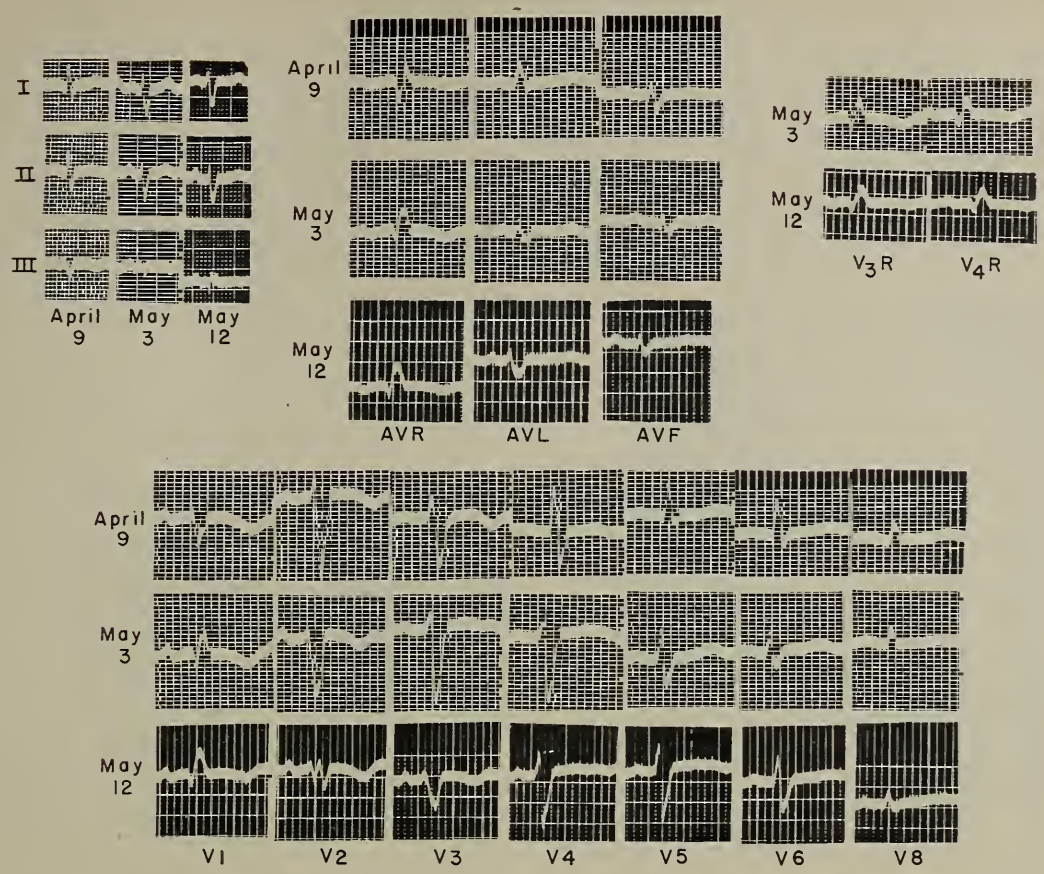


Fig. 4. Electrocardiograms reveal progressively increasing right bundle branch block, paralleling the clinical increase in symptoms. Well demonstrated in practically all leads.



Fig. 5. The right ventricle is opened and the wall retracted upward. The cauliflower-like mass is seen in the right ventricular cavity and extrudes up through the main pulmonary artery in the upper center of the photograph.

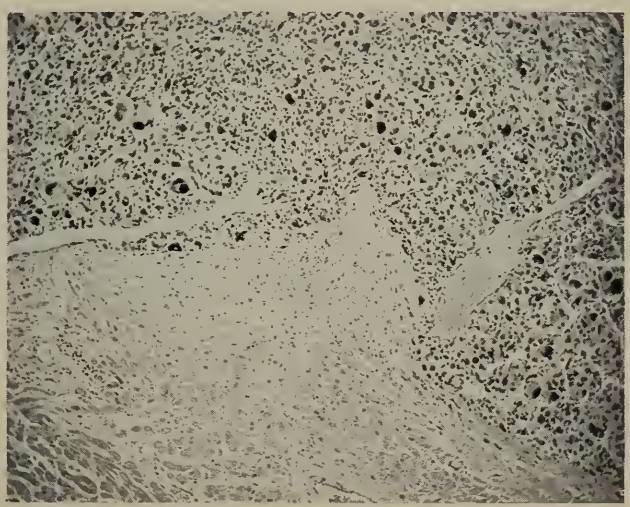


Fig. 6. The highly anaplastic sarcoma tissue is seen adjacent to normal myocardium. The tumor cytology is identical to that found in the uterine and abdominal wall tumors.

gan to manifest dyspnea and slight cyanosis with tachycardia on minimal exertion, e.g., walking five feet from a chair to bed. This problem steadily increased until the least physical stress left her gasping with fish-mouth type respiration and definite cyanosis. The venous pressure eighteen days postoperatively was 150 mm. water and the circulation time arm to tongue was seventeen seconds (Decholin) and arm to lung nine seconds (Ether). Progress electrocardiogram that day demonstrated progression in the findings of right ventricular hypertrophy, and there was now some right bundle branch block (Fig. 4).

The progression in electrocardiogram changes, the enlargement of the right side of the heart on chest x-ray, the dyspnea and cyanotic pallor, the absence of evidence radiologically of metastasis to the lungs or mediastinum, the gruff new systolic murmur in the pulmonic area which persisted when the anemia was corrected, the sterile blood cultures, all indicated there was probably metastatic sarcoma in the right side of the heart interfering with pulmonary artery flow.

Average of three vital capacity determinations was 2,000 cc. Venous pressure redetermined the twenty-first postoperative day was 125 mm. water, rising to 240 mm. water with liver pressure. She was given a therapeutic trial injection of 1 cc. Thiomerin daily for two days, but her weight did not change, remaining 125 pounds. Her symptoms did not improve with sedatives or vasodilators. Cardiac fluoroscopy produced no new evidence. The twenty-fifth postoperative day, a protodiastolic gallop rhythm was heard for the first time and persisted thereafter. Progress electrocardiogram demonstrated further increase in the right bundle branch block (Fig. 4). Progress chest x-ray revealed remarkable increase in the fullness of the upper half of the right border of the heart (Fig. 3). On the twenty-eighth postoperative day, the patient suddenly sat up in bed, markedly dyspneic and cyanotic, and expired.

Post-mortem examination was performed and revealed small metastatic lesions in the lungs and kidneys. Within the cavity of the right ventricle there was a large polypoid cauliflower-like mass filling most of the cavity and extruding up through the main pulmonary artery, almost occluding its lumen (Fig. 5). The pericardium was smooth and glistening and there was no external evidence of tumor. The histopathology was identical with the primary tumor in the uterus and revealed highly anaplastic sarcoma (Fig. 6).

Comments

The sequence of events in this case made secondary cardiac tumor the most tenable antemortem diagnosis. Without clinical evidence of preceding heart disease, the patient developed recurring acute cardiac failure shortly after demonstration of a metastasizing sarcoma. Since sarcoma, almost without exception, metastasizes as a "ball," the negative lung x-rays were evidence against presence of sufficient pulmonary metastasis to produce right-sided failure. That failure was not sustained (normal circulation times, minimally elevated venous pressure) made it ever more unlikely that pulmonary or mediastinal metastasis was the mechanism.

The cause for the right bundle branch block affords interesting speculation. The tumor invaded the septum and undoubtedly produced some mechanical block by destroying bundle branches, but there was also considerable dilation and some hypertrophy of the right ventricle. Both processes undoubtedly contributed to the electrocardiogram pattern.

Summary

1. The first reported case of sarcoma of the uterus metastatic to the heart is presented.

2. Basis for the antemortem diagnosis is described.

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Statistics compiled by the Metropolitan Life Insurance Company reveal that in the brief period since the end of the war, the average length of life (the expectation of life at birth) of the industrial population of the United States has increased by about two years. In 1948, the average reached the all-time high of 67.16 years. Since 1911-12, when this series on the longevity of the industrial population was started, twenty and one-half years have been added to the expectation of life at birth.

A Simplified Technique for Wiring Aneurysms

By Sidney H. Orr, M.D., and
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THE SURGICAL treatment of aortic aneurysms has been reviewed by both Blakemore[1] and de Takats.[2] At the present stage of the surgical attack upon such problems, wiring is occasionally a necessary facet of the surgeon's armamentarium.

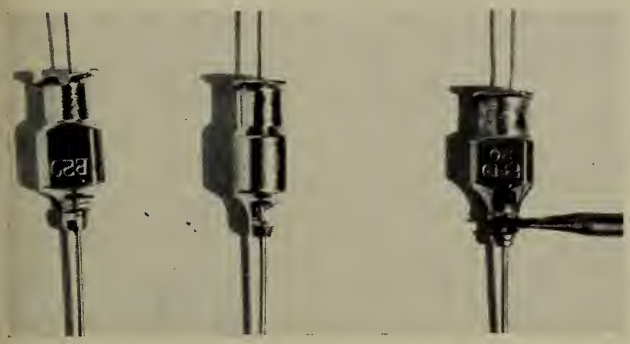


Fig. 1. Apparatus described.



Fig. 2. Preoperative view.

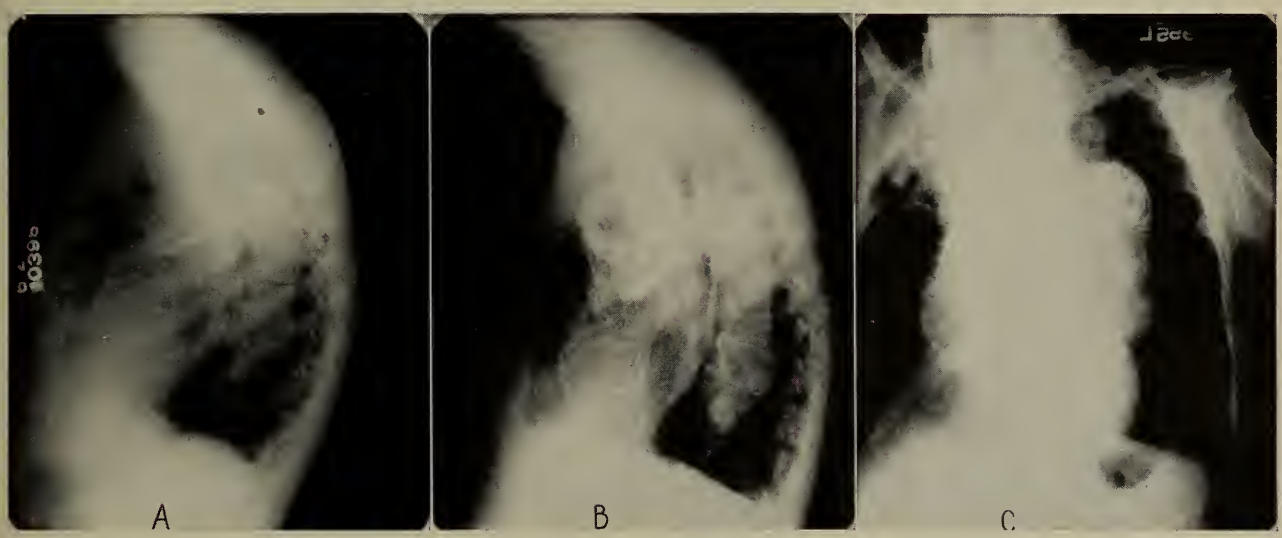


Fig. 3. (a) Lateral view after first operation; (b) lateral view after second operation; (c) oblique view after the second operation.

Any surgeon who has undertaken such a step is well aware of the great consumption of time and energy attending. A simplification and speeding of the technique is of interest to those who are concerned with such surgical procedures and we present in this paper a method which has worked well in our hands.

The apparatus utilized in this technique consists of:

1. A 20 gauge 3.5 inch spinal needle which has been altered by grinding a groove on one side of the hub above its junction with the shaft, to a depth necessary to enter the channel of the needle. (Fig. 1)

2. A motor driven dental hand piece and a No. 700 fissure dental burr.

3. No. 30 stainless steel wire.

The technique consists of a percutaneous puncture of the aneurysm with a spinal needle, following which the stylet is removed and the No. 30

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Hereditary Capillary Fragility

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IN 1926 von Willebrand[15] published a study of a familial hemorrhagic disease, as observed in the inhabitants of a small island in the Baltic Sea. In his group the bleeding time was found to be markedly prolonged, with normal platelet counts and coagulation time. von Willebrand gave the name "pseudohemophilia" to this bleeding diathesis. Subsequently, many papers,[5,6,8,13] have appeared describing familial hereditary hemorrhagic diseases of similar type, under the following names: athrombocytopenic purpura, pseudohemophilia, constitutional thrombocytopathy, hereditary hemophilioid purpura, Glanzmann's disease, and von Willebrand's disease. More recent literature has placed this syndrome under the term "thrombasthenia."[7] In 1950, the Committee for the Clarification of Nomenclature of Cells and Diseases of the Blood and Blood Forming Organs, recommended the adoption of the term "Hereditary Capillary Fragility" for the vascular type (von Willebrand's disease). "Thrombocytopathic Purpura" was suggested by the same group to replace Glanzmann's disease.[4]

Studies by various investigators have established hereditary capillary fragility as a definite entity in hemorrhagic disease. It has been shown[14] that hereditary capillary fragility is transmitted as a dominant, sex linked Mendelian characteristic in the X chromosome. The disease affects both sexes, but occurs more frequently and severely in the female. Members of either sex may act as carriers without showing clinical manifestations of abnormal bleeding. Sporadic cases are not uncommon; in one series of eleven cases, only four patients gave a definite history of familial bleeding.[5] The mechanism for the abnormal bleeding in hereditary capillary fragility has been studied by Macfarlane.[12] He reported observations on capillary microscopy on patients with this disorder, noting the capillaries to be distorted and often of bizarre form. Using a glass fiber, he found that the capillaries did not contract normally after trauma, suggesting a vascular defect in this disease. These observations were confirmed in one case by Perkins[13] who also noticed a failure of capillary constriction. Others have reported normal capillary morphology.[5] The microscopic features of petechiae formation have been studied by Humble[9] and Landis.[10] Alexander[2] reported an unusual patient with thrombasthenia who developed thrombocytopenia. Aggeler[1] has a similar observation in one case, suggesting a possible relationship between these two diseases. From the literature most of the patients with hereditary capillary fragility continue to have episodes of abnormal bleeding throughout their lives. Death by exsanguination following minor surgical procedures has been reported but, at the same time, other patients have undergone major abdominal surgery without excessive bleeding. Estren,[5] et al, in a review of the literature, (sixty-four patients to which they added eleven cases) reports the bleeding site in order of frequency, as follows: Nose 75 per cent, skin 70 per cent, gums 39 per cent, postoperative bleeding (including dental extractions) 31 per cent and bleeding into joints 12 per cent.

The present report concerns observations on twenty-four patients classified as hereditary capillary fragility seen at the Henry Ford Hospital from 1940 to 1950 (Table I). The criteria for the diagnosis in these cases were: (1) definite history of abnormal bleeding; (2) increased bleeding time; (3) normal platelet count; (4) normal or near normal coagulation time.

The disease was observed in fourteen females and ten males. This is in keeping with reports of a higher incidence (approximately 3:2) in females.[15] The youngest patient in our series was four and the oldest seventy-four years of age. Four patients were under ten years of age at the time the disease was diagnosed. In four instances abnormal bleeding had been noted since birth. Table II lists the site of the abnormal hemorrhagic episodes which occurred during the period of observation in the twenty-four cases.

The type of bleeding in all instances was characterized by being immediate and brisk, without delayed hemorrhage, as is frequently seen in the hemophiliac. As in other series, epistaxis was the most common complaint, with ecchymoses and dental extraction hemorrhage as a frequent finding. In our cases, menorrhagia, lacerations, postoperative bleeding (tonsillectomy, postpartum and

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TABLE I. CLINICAL AND LABORATORY FINDINGS IN 24 CASES OF HEREDITARY CAPILLARY FRAGILITY

Case	Age	Sex	Hemorrhagic Manifestation	Family History	Bleeding Time in Minutes (Duke)	Clotting Time in Minutes (Lee-White)	Tourniquet Test	Clot Retraction	Platelet Count 10^3	Vitamin C	Prothrombin Per Cent	Protamine Titration mg.	Capillary Microscopy
1	52	F	Epistaxis Post-Dental Extraction Menorrhagia	Negative	13	4	Positive	Normal	160		90		
2	41	F	Ecchymoses Myalgia	Brother Sister	23	20	Positive	Normal	242		86	0.10	Normal
3	55	F	Epistaxis	Negative	11	16 8 10			261		90	0.16	
4	74	M	Epistaxis	Negative	10	7	Positive	Normal	188		100	0.18	
5	19	F	Epistaxis Ecchymoses	Negative	13	11	Negative	Normal	220		90		
6	29	F	Ecchymoses	Negative	9	18 8 12	Positive	Normal	160		100	0.12	Normal
7	34	M	Laceration Post-Dental Extraction	Father	9½	10	Negative	Normal	178		100		
8	21	M	Melena	Grandfather Uncle	28	10		Normal	196				
9	29	M	Hemarthrosis	Negative	8½	11½	Positive		206				
10	37	F	Menorrhagia Epistaxis	Daughter	13	7½	Positive		234	0.34	100		
11	14	M	Epistaxis Post-Dental Extraction	Negative	8½	7		Normal	238	0.72	100		Normal
12	21	M	Ecchymoses Post-Dental Extraction Laceration	Brother	34	10			168	0.30	100		
13	25	F	Post-Dental Extraction Laceration	Negative	8½	8		Normal	218	0.54	100		
14	52	F	Menorrhagia Post-Tonsillectomy	Niece Nephew	9	12	Negative	Normal	200				
15	44	M	Epistaxis Hemarthrosis	Uncle Grandfather	30	27 9 12	Positive	Normal	186	0.40	100		
16	45	F	Menorrhagia Ecchymoses	Negative	14	22 10	Positive		236				
17	21	M	Melena, Post-Tonsillectomy Laceration	Grandfather	28	11		Normal	196				Normal
18	49	F	Menorrhagia Epistaxis	Negative	24	10½	Negative	Normal	226		100		
19	6½	M	Hematemesis Epistaxis	Mother	10½	8	Positive	Normal	216		100		
20	56	F	Ecchymoses Post-Dental Extraction	Negative	10	10	Negative	Normal	302	1.19	100		
21	53	F	Epistaxis	Negative	8	9	Positive	Normal	192		100		
22	45	F	Ecchymoses	Son	16	7	Positive	Normal	240		100		Normal
23	5	M	Laceration Epilepsy Epistaxis Ecchymoses	Mother Uncle	10½	11	Negative	Normal	227		100		
24	9	F	Post-Dental Extraction	Mother	9	8	Positive	Normal	264		100	0.10	

post-dental extractions), gastro-intestinal bleeding, and bleeding into the joints were encountered less frequently than noted in previous reports. Petechiae were not noted.

It was not uncommon for the patient to complain of vague distress in reference to the joints of the extremities. Myalgia was usually accompanied by large ecchymoses of the thighs with the suspicion of deeper hemorrhages within the muscles themselves. In one patient (case fifteen) the joint symptoms were most troublesome. The knees and elbows were frequently involved. Onset of symptoms was always related to some unusual form of physical exertion or trauma. Following injury, the affected limb was useless, with painful immobilization usually lasting twenty-four hours. Examination of the affected joint at that time was noteworthy for the lack of signs of disease, except for pain on motion. On the second or third day, subcutaneous discoloration would occur about the

TABLE II.

SITE AND FREQUENCY OF ABNORMAL BLEEDING IN 24 CASES OF HEREDITARY CAPILLARY FRAGILITY

	Cases	Per Cen
Epistaxis	13	54
Ecchymoses	12	50
Postoperative (Including post-dental extractions—6 cases)	14	58
Menorrhagia	6	24
Lacerations	6	24
Gastro-intestinal	3	12
Gums	2	8
Joints	2	8

joints, indicating previous deeper hemorrhage. The symptoms regularly cleared in three to four days without residual pain or limitation of motion.

A prolonged bleeding time was demonstrated in every patient. In nine patients the bleeding time ranged from eight and one-half to ten minutes; in nine patients, ten to twenty minutes; and in six patients, over twenty minutes. In five of the reported twenty-four patients, the coagulation time (Lee White) was beyond the normal range. In one patient the clotting time (on one examination) was twenty-seven minutes. This test was later repeated on several occasions, and found to be within normal range. In two other patients, clotting time was delayed to twenty to twenty-two minutes and in one patient, to eighteen minutes. In each instance, when this test was repeated on another occasion, it was found to be within normal limits. The tourniquet test was positive in twelve of eighteen patients tested at the time the diagnosis was made (Table III). The clot retraction was considered normal in the nineteen patients on whom the test was performed. The platelet counts were within normal limits. Morphologically, the platelets in the peripheral blood smear appeared to be normal. A family history of abnormal bleeding was elicited in twelve of our patients.

We were able to study the bone marrow of three of our patients. Quantitatively and qualitatively the bone marrow elements were found to be within normal range. In five patients protamine titrations for the detection of an increase in circulating heparinoid substances demonstrated no change from the accepted normal values.

Various forms of therapy have been suggested for the control of the abnormal bleeding. Such agents as calcium, ascorbic acid, water soluble vitamin K preparation (menadione) and splenectomy have resulted in uniform failure to control the bleeding tendency. It is recommended that bleeding be controlled by careful surgical technique, rest, cold applications, as well as pressure bandages and the rational employment of local agents as topical thrombin, thromboplastin and snake venom. Anemia due to hemorrhage was of sufficient degree in six of our patients to require blood transfusion. Ferrous sulfate very quickly returned the blood hemoglobin to normal levels in others who had lost iron through their bleeding tendency. Prophylactically, it is recommended that patients having this type of hemorrhagic disorder should avoid trauma and non-essential surgical procedures.

TABLE III.

	Cases	Per Cent
Tourniquet Test, positive (18 cases tested)	12	67
Family History, positive	12	50
Delayed Clotting Time	4	18

In view of the capillary factor in this disease, we elected to give twelve of our patients large doses of rutin[3,11] (200-400 mg. daily). Although variations in the bleeding times and tourniquet tests have been observed from day to day in untreated patients, it was the clinical impression of the authors and the subjective opinion of the patients that rutin tended to lessen the severity of the bleeding symptomatology. While the criteria in estimating the value of this agent are not precise, it was noted that the bleeding time in nine of the twelve treated patients was considerably shortened, being reduced to normal in six instances. In these six patients the tourniquet test became normal while on rutin therapy. In view of these suggested findings, we have effectively utilized rutin prophylactically and therapeutically in minor surgical procedures, such as dental extractions.

Summary and Conclusions

1. Twenty-four cases of hereditary capillary fragility are added to the reported cases for a total of ninety-nine patients.

2. Capillary microscopy in five patients failed to demonstrate abnormalities in the morphology of the capillaries.

3. In five patients protamine titrations for the detection of circulating heparinoid substance gave normal values.

4. Rutin in divided doses of 200-400 mg. every day favorably influenced the bleeding tendency in some cases.

5. Examples of thrombocytopathic purpura (Glanzmann's disease) were not encountered.

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Myocardial Infarction

Comparison of Results Following Use of Dicumarol and Dicumarol with Heparin in the Acute Stage

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THE USE of dicumarol in the treatment and prevention of thromboembolic disease has been generally accepted and included in the present-day therapeutic armamentarium. An intensive survey has been conducted in sixteen of this country's leading hospitals under the auspices of the American Heart Association and the United States Public Health Service to evaluate the usefulness of anticoagulants in coronary thrombosis.[16] Their observations have established the value of these products in coronary heart disease. In addition many reports have appeared in the literature regarding the various diagnostic and prognostic aspects of this disease.[1,3,9,11,12,13,15] This paper will not deal primarily with these problems.

In spite of all that has been written on the subject of coronary thrombosis and myocardial infarction only one report has appeared comparing the efficacy of heparin and dicumarol in combination and alone.[14] No reports have been published from smaller private hospitals in small or middle sized cities where there is closer personal contact with the patient, where hospitalization is more readily available and where, due to the smaller volume of patients, prothrombin times are commonly reported as per cent of normal using undiluted plasma. This is a simple linear relationship as contrasted with the parabolic curve obtained when diluted plasma is used and the results expressed in per cent of concentration.

In view of these facts it was felt that a survey of patients in a small (270 bed) private hospital might show a significant difference in complications and mortality rate as compared with reports from larger medical centers. Reports from private hospitals have the added advantage of affording a good comparison of cases since some physicians employed anticoagulants routinely while others chose not to employ anticoagulants in any of their patients.

This report includes all patients admitted to Butterworth Hospital between the period of July, 1947, to January, 1951, a period of three and one-half years, on whom a diagnosis of acute coronary thrombosis with myocardial infarction was established. Only those cases whose clinical course and electrocardiographic studies were diagnostic or those cases proven at autopsy were employed in this series.

There were 266 such cases admitted with eighty-eight deaths for an over-all mortality rate of 33 per cent. Of the total cases 218 were admitted after they had suffered their first coronary occlusion with myocardial infarction, thirty-eight after the second attack and ten after they had suffered the third attack. Mortality rates were 28.4 per cent, 52.6 per cent and 60.0 per cent, respectively. Fifty (57.4 per cent) of the eighty-eight fatalities were subjected to post-mortem examination (Table I) while the rest of the infarctions were localized on the basis of the electrocardiographic studies alone. One hundred and fifty-two were demonstrated to have had infarction of the anterior surface of the myocardium (57.1 per cent), eighty-four of the posterior myocardium (31.6 per cent) and thirty cases were not localized (11.3 per cent).

As can be seen from Table I, 26.9 per cent of the patients with anterior myocardial infarction died, whereas 33.3 per cent of the patients with posterior infarction died. This is not in agreement with Smith, Keyes and Denham's[14] report from

TABLE I.
MORTALITY RATES ACCORDING TO LOCATION OF INFARCTION AND NUMBER OF PREVIOUS INFARCTIONS

	Cases	Deaths	Mortality
Total number	266	88	33.0%
No previous history	218	62	28.4%
One previous attack	38	20	52.6%
Two previous attacks	10	6	60.0%
Location			
Anterior	152	41	26.1%
Posterior	84	28	33.3%
Unknown	30	19	63.3%

TABLE II. SEX AND AGE OF PATIENTS

	Male	Female
Total cases	188 (70.6%)	78 (29.2%)
Deaths	52	36
Mortality	27.1%	46.1%
Average age		
First coronary	55.4	61.2
At death	61.0	65.0

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Presented at Staff Meeting, Butterworth Hospital.

TABLE III. RELATIONSHIP OF ANGINA PECTORIS TO MORTALITY RATE

	Cases	Deaths	Mortality
Angina for longer than one month	122	30	24.6%
No angina or for less than one mo.	144	58	40.3%

Detroit but is in close agreement with the series reported by Mintz and Katz[12] from Chicago. Those patients in whom the exact site of the infarction was undetermined had a mortality rate of 63.3 per cent. This can be explained by the fact that many of these patients died before complete electrocardiographic studies could be done, many of them had massive infarction involving portions of the anterior, posterior and septal regions of the heart and most of them were admitted after they had suffered their second or third attack making localization on the electrocardiogram unreliable.

As can be seen from Table II the ratio of male to female was 2.4 to 1, which is in agreement with most of the other reported series. Smith et al[14] from Detroit reported a higher ratio of 4.4:1 but Billings et al[1] from Nashville reported a ratio of 2.7:1 and Mintz and Katz[12] in Chicago reported a figure of 2.2:1. The mortality rate for females was somewhat higher than that for males and the average age for females was higher than males both at the time of the first attack and at the time of death. (Table II)

That anastomosis occurs between branches of the coronary arteries was shown conclusively by Gross.[7] The subject has been lately reviewed by Blumgart.[2] Lowe[10] discussed the dynamic equilibrium that prevails between the vascular fields and showed that "tying off one branch diverted a gelatin solution into other channels which more or less completely inject the fields of the occluded vessel." The usual twenty-four-hour mortality rate following experimental occlusion of the anterior descending coronary vessels of dogs is 50 per cent. Harris and Hokernot[8] have shown that if the occlusion is accomplished gradually over a period of thirty minutes, thereby allowing anastomotic vessels to dilate, death does not occur. Clinically one would expect to see the same beneficial effect in patients having widely dilated anastomotic vessels prior to occlusion. Prolonged coronary insufficiency with angina pectoris should theoretically be an excellent stimulus for the dilatation of anastomotic vessels as well as the stimulus for the development of new collateral vessels. This theory gains support from our statistics. As can be seen from Table III, 46.3 per cent of the patients had complained of anginal pains for one month or longer before actual infarction occurred and 53.7 per cent gave either no history of angina or had angina for less than one month before infarction occurred. The mortality rate in the first group was 24.6 per cent and in the second group 40.3 per cent.

In comparing the mortality rates of patients receiving anticoagulants and those not receiving these drugs it was felt that all patients dying within the first tweny-four hours should be eliminated. Most of these died before anticoagulants could be given and hence would have to be included in the untreated group, unjustifiably raising the mortality in this group. Actually most of these patients died on the way to the hospital, in the emergency room, or within the first hour or two after admission. There were thirty-two such patients comprising 12 per cent of the total. Subtracting these leaves 234 patients for comparison. These patients were divided into four groups: Group I—no anticoagulants; Group II—dicumarol alone; Group III—dicumarol plus heparin; Group IV—heparin alone.

In cases where dicumarol was used, 300 mg. was given on the first day, 200 mg. on the second day and daily dosage thereafter was based on the prothrombin times. Prothrombin times were reported both in seconds and per cent of normal. The thromboplastin employed was standardized daily on normal plasma but dilutions were not done. The thromboplastin employed was a commercial preparation from Chilcott Laboratories marketed under the trade name Simplastin. Any thromboplastin giving values below fifteen seconds or above twenty seconds when used with normal whole plasma was discarded. For full therapeutic effects the prothrombin time was kept between 25 and 50 per cent of normal and it was felt that both safe and satisfactory therapeutic results were obtained at these levels. When heparin was employed, Depoheparin® was routinely used and given in sufficient dosage to keep the Lee-White coagulation time at two times its pre-treatment level.* When this substance was used in the Group III patients, it was given only until the dicumarol had resulted in a

*Depoheparin® is marketed by the Upjohn Company in two forms—with and without vasoconstrictor. Only the depoheparin without vasoconstrictor was employed. This substance gives a prolonged action. Each 1 cc. contains heparin sodium 200 mg., gelatin 180 mg., and dextrose anhydrous 80 mg. The preservative used is sodium ethyl mercuri thiosalicylate 1:10,000).

TABLE IV.
MORTALITY RATES OF PATIENTS RECEIVING NO ANTICOAGULANTS, THOSE RECEIVING DICUMAROL ALONE, THOSE RECEIVING DICUMAROL AND HEPARIN AND THOSE RECEIVING HEPARIN ALONE.

	Total	I	II	III	IV
Number of cases	234	89	95	43	7
Deaths	56	34	13	7	2
Mortality rate	23.9%	38.2%	13.6%	16.2%	28.5%
Autopsies	32	20	5	5	2
Autopsy percent	57.1%	60.0%	35.7%	71.4%	100.0%

fall of the prothrombin time to therapeutic range. This usually occurred on the third to fourth day of therapy.

Table IV gives an over-all mortality of 23.9 per cent. It can readily be seen from this table that there is a significant reduction in mortality between the untreated and treated groups from 38.2 per cent in Group I to 13.6 per cent in Group II and 16.2 per cent in Group III. It will also be noted that the difference in mortality between Groups II and III are insignificant. These statistics agree closely with those reported by Smith, Keyes and Denham[14] and point to the conclusion that dicumarol alone is as efficacious as dicumarol and heparin in combination. This upholds the belief of many writers[5,6] that when coronary occlusion reaches the attention of the physician it has already occurred and an infarct is already present. In many cases it has been present several hours or days. Whatever part the coagulability of the blood has played in this occurrence is done and over. It does not seem reasonable that any anticoagulant drug could effect a change in what is already an accomplished fact. There is no convincing evidence that thrombosis of the coronary vessel increases or propagates. Foord[4] showed at autopsy that the thrombus is only a matter of several millimeters and the evidence is against propagation.

There were only seven patients included in Group IV. In these cases heparin was given throughout the first three weeks of illness and in two cases through the first four weeks.

The high mortality rate (28.5 per cent) is probably misleading and should be disregarded. These patients were given heparin because of persistent nausea and vomiting, precluding the use of oral medications such as dicumarol. They were the most critically ill patients when first seen and a higher mortality rate could be expected.

An analysis of the causes of deaths by groups reveals that the reason for the marked fall in mortality was due primarily to a decrease in fatal thromboembolic phenomena. It will be noted from Table V that approximately 50 per cent of all deaths in Group I were due to thrombus formation (pulmonary emboli, cerebral thrombosis or embolus and recurrent coronary thrombosis) while only 22 per cent of Group II and 14.3 per cent of Group III were due to these causes. There were seventeen patients in Group I, three patients in Group II and one patient in Group III whose deaths could be ascribed to thromboembolic manifestations. It is of added significance to note that of the three patients dying in Group II of thromboembolic complications, one had a prothrombin time at the upper limit of therapeutic effectiveness at the time of death. The level in this patient on the day of death was thirty seconds. The normal for that day was fifteen seconds and per cent of normal was therefore fifty. In one of the two remaining patients dicumarol had been temporarily stopped on the thirteenth postcoronary day because of gastric distress. This patient had a recurrent coronary thrombosis on the seventeenth day of his illness, four days after cessation of dicumarol therapy. We can say, therefore, that only one death occurred from thromboembolic phenomena while adequate dicumarol control was maintained. This accounts for only 7.7 per cent of the fatalities in Group II. When both fatal and non-fatal thromboembolic phenomena were considered it was found that 23.6 per cent of Group I, 6.3 per cent of Group II and 2.3 per cent of Group III showed evidence of peripheral thrombophlebitis, and cerebral, mesenteric, or pulmonary emboli.

Gilbert and Nalefski[5,6] state "the results obtained with dicumarol and heparin so closely approximate those which we have obtained with the xanthine series, that the question arises whether or not the results obtained with the anticoagulant drugs are not due to some effect other than their anticoagulant action." Utilizing a Morawitz-Zahn cannula which was inserted itno the coronary sinus of dogs they measured the variations in blood flow following injections of theobromine sodium acetate, heparin and dicumarol. Theobromine sodium acetate resulted in a 180 per cent increase, heparin a 77.6 per cent increase and dicumarol a 116.5 per cent increase in blood flow. It was their conclusion that the beneficial results of anticoagulants are due to the increase in coronary blood flow. In this series vaso-dilating drugs (papaverine, aminophyllin, et cetera) were employed in only a few cases in both

TABLE V. CAUSES OF DEATH

Group	Hemorrhage	Pulmonary Embolus	Congestive Failure	Cerebral Thrombus or Embolus	Abnormal Rhythm	Recurrent Coronary	Ventricular Rupture	Cerebral Hemorrhage	Secondary Infection	Unknown
I	1 2.9%	13 38.2%	7 20.6%	2 5.8%	4 11.7%	2 5.8%	2 5.8%	1 2.9%	1 2.9%	1 2.9%
II	1 7.7%	2 15.4%	3 23.1%	0 0	3 23.1%	1 7.7%	1 7.7%	0 0	0 0	2 15.4%
III	0 0	1 14.3%	4 57.1%	0 0	0 0	0 0	1 14.3%	0 0	1 14.3%	0 0
IV	0 0	1 50%	1 50%	0 0	0 0	0 0	0 0	0 0	0 0	0 0

TABLE VI. NON-THROMBOEMBOLIC DEATHS.

Group	Total Number of Cases	Deaths Not Related to Thrombi	Mortality
I	89	17	19.1%
II and III	138	16	11.5%

TABLE VII. HEMORRHAGIC PHENOMENA

Group	I	II	III	IV
Fatal Percent	1 2.2%	1 1.05%	0 0	0 0
Nonfatal Percent	2 1.1%	6 6.3%	1 2.3%	1 14.3%
Total Percent	3 3.3%	7 7.3%	1 2.3%	1 14.3%

the treated and untreated groups. If dicumarol is considered to have vasodilating properties, we can consider Groups II and III to have received a vasodilator and Group I to have received none. Comparing these groups further it is interesting to note that after all deaths due to thromboemboli are discarded the mortality rate in Group I is 19.1 per cent and in Groups II and III is 11.5 per cent (Table VI). This would suggest some additional favorable effect resulting from dicumarol therapy and in view of the experimental findings by Gilbert and Nalefski might lead one to base this decreased mortality on increased coronary blood flow.

Fatal bleeding occurred in only one patient in both groups II and III, giving a mortality of 0.7 per cent in all patients receiving dicumarol (Table VII). At the same time there was one case of fatal bleeding in the control Group I for a mortality rate of 1.1 per cent. Both fatalities were due to massive gastro-intestinal hemorrhage and in both patients bleeding was demonstrated from a sclerotic artery in the base of a duodenal ulcer. There was no significant difference in non-fatal hemorrhagic phenomena occurring in the treated and untreated groups. The rate of minor bleeding in the various groups was 2.2 per cent in Group I and 5.8 per cent in Groups II and III. It is of interest to note that of the seven cases of non-fatal bleeding in Groups II and III all but two had prothrombin times at or below the recommended level of 25 per cent. Levels at the time of bleeding were 22, 5, 20, 23, and 26 per cent of normal. The two above 25 per cent were both 30 per cent at the time of bleeding. One of these had moderate bleeding from external hemorrhoids which had bled on occasions prior to dicumarol therapy. The other patient had moderate bleeding from the cervix lasting two days. This patient, prior to this time, had had no cervical bleeding since her menopause eight years before.

Conclusions

1. There is a definite and statistically significant reduction in mortality in patients suffering from acute coronary thrombosis and myocardial infarction when treated with anticoagulants.

2. There was no significant difference in mortality rate between patients receiving dicumarol alone and patients receiving both dicumarol and heparin (Depoheparin®).

3. The marked reduction in mortality resulted primarily from a reduction in fatal thromboembolic complications.

4. There was a moderate but definite reduction in mortality in non-thromboembolic deaths in the treated group suggesting an additional beneficial effect of dicumarol compatible with increased coronary blood flow.

5. No significant bleeding occurred in patients receiving dicumerol when prothrombin time was kept between 25 and 50 per cent of normal values.

6. Patients with a history of anginal pain preceding the infarction by more than one month had a significantly lower mortality rate than those patients without preceding angina pectoris.

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Re-enforcement of Vascular Grafts with Intestinal Musculature

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VASCULAR surgery, having received a tremendous impetus by the needs of World War II, has made rapid progress in the last decade. The use of heterogenous and autogenous blood vessels for grafts is now a fairly well-established surgical procedure. However, although segments of veins or arteries can be inserted into the vascular tree with good immediate results, the ultimate fate of the graft leaves much to be desired.

If the graft does not thrombose immediately after surgery, it remains patent and receives its blood supply from several sources. The intima derives its nutrition from the blood stream itself, while the adventitial layer revascularizes from the surrounding tissue layer. The medial muscular layer of the graft atrophies in both arterial and venous grafts.

When the graft is placed into the arterial side of the vascular tree, it is subjected to arterial pressure the same time that the atrophic muscle fibers of its media are being replaced by fibrous scar tissue. After several months of continuous pounding of arterial pressure, this fibrous scar tissue stretches gradually, its walls thin out and dilate, and an aneurism is formed. Most vascular grafts, subjected to normal arterial pressure, will be dilated within two years of surgery. This has led the authors to search for a means of supplying vascular grafts with a covering of living smooth muscle with its blood and nerve supply intact. The intestine, with its abundant blood and nerve supply and its proximity to the great vessels, was the logical place to investigate.

Methods and Procedures

Healthy dogs, weighing 10 to 13 kilograms, were used in this experiment. Each animal was placed on a fluid diet for twelve hours preceding surgery. The anesthetic used was intravenous sodium nembutal (Abbott), 1 cc. per 2.5 kgm. of body weight. Tincture of mercresin was applied to the abdomen after it had been shaved, and the animal was draped for a laparotomy.

The abdominal cavity was entered through a midline incision from the xyphoid to the pubis. The peritoneum lateral to the descending colon was incised and the colon, small bowel and kidney were retracted medially, exposing the abdominal aorta and its branches. A segment of the aorta was dissected free from the trifurcation of the aorta cephalad for approximately 4 to 5 cm. All tributaries leaving the aorta were ligated and divided between ligatures, thus freeing the abdominal aorta.

A segment of the aorta, approximately 2.5 cm. long, was removed after being occluded above and below with bull-dog clamps. This segment was reversed to insure complete destruction of the blood and nerve supply and reinserted, using a 4-0 running silk suture.

At this point it was necessary to relieve the peripheral vasospasm produced by occluding and manipulating the aorta. Thrombosis occurs at the site of the graft if this vasospasm is not relieved. One of two procedures can be done. Etamon (Tetraethylammonium chloride, Parke-Davis), 2 cc. intramuscularly, can be administered or a bilateral sympathectomy can be done.

The Etamon is used to produce a ganglionic block and is administered three times daily until stiffness in the hind legs disappears. Average duration of treatment required is three to seven days.

If a bilateral sympathectomy is used, the chain on the left is readily removed at the same time that the graft is done since it is in the operative field. The right side can be removed by incising the mesentery lateral to the ascending colon and retracting it medially. Several branches of the inferior vena cava have to be divided between ligatures in some of the animals in order to adequately expose and remove the lumbar sympathetic chain on the right.

To re-enforce the graft a segment of the ileum about one and a half inches long, with one of the large arcuate arteries supplying it, is transected. The two ends of the ileum are reunited using a side-to-side or end-to-end anastomosis. A two-layer suture technique is used.

The section of small bowel to be used as the muscle covering for the vascular graft is incised

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longitudinally along its antimesenteric border, producing a square or oblong surface. The mucous membrane is dissected off to obtain the smooth muscle layer containing its own blood and sympathetic nerve supply. If this is done in the proper plane, the layers separate easily with a minimum of bleeding.

The denuded area of bowel is passed through a small hole made in the peritoneum, which has been placed near the graft at the base of the mesentery, where it will not endanger the blood supply of the transplant. The transplant is placed about the blood vessel graft and trimmed down to proper size. It is sutured in place with silk sutures. The peritoneal incisions are closed and the abdomen is closed in layers.

The entire procedure takes sixty to ninety minutes' operating time, depending upon whether or not a lumbar sympathectomy is done.

Postoperatively picrotoxin is given as a stimulant. During the first twenty-four hours after surgery, the animals receive 250 to 500 cc. of 5 per cent glucose in water subcutaneously. They are given 1 to 2 cc. of penicillin intramuscularly every day.

Discussion

In this series we have proven to our satisfaction that it is technically feasible in animals to use a segment of the small intestine to re-enforce a vascular transplant.

The animals have not been observed for a long enough period to determine whether or not this transplanted intestinal smooth muscle will prevent aneurism formation.

We do not know as yet how this transplanted muscle reacts when the intestine is stimulated. Data on this aspect of the problem are being gathered and evaluated. The transplant reacts the same way as the intact gut to mecholyl and Etamon administered intravenously when observed at exploratory laparotomy.

This procedure can be performed as a single operation or it can be done in two stages. The vascular transplant and sympathectomy can be done as the first stage and the intestinal transplant as the second stage.

Conclusions

1. It is technically feasible to use the smooth muscle of dog intestine with its mucous membrane removed, but its nerve and blood supply intact, as a living median and an adventitial layer in transplanted blood vessels.
2. A new field of surgery upon the aorta and the great vessels would be opened if the application of this procedure proves to be practical.

SIMPLIFIED TECHNIQUE FOR WIRING ANEURYSMS

(Continued from Page 61)

stainless steel wire is manually fed into the aneurysm until the first loop is made. The dental burr is then applied perpendicular to the wire exposed through the notch. Setting the machine in motion causes the wire to be fed rapidly into the aneurysm. Since the burr is rough it not only feeds the wire through the needle, but also notches the surface of the wire.

To illustrate the speed and ease with which an aneurysm may be wired, we briefly present a case.

Case 1.—A sixty-one-year-old white man, with active right upper lobe tuberculosis demonstrated multiple aneurysmal dilatations of the ascending aorta on chest x-rays. One of these presented just above the suprasternal notch. (Fig. 2.) The first attempt at wiring was in a more conventional manner and was done percutaneously through a No. 20 spinal needle using cervical block anesthesia. A No. 32 gauge stainless steel wire was fed through this needle manually. Approximately 300 feet of wire were fed into the aneurysm in five hours' time (Fig. 3-a). The patient was sent to his room but subsequent examination revealed that the mass in the suprasternal notch was still pulsatile and enlarging. It was felt that further wiring was indicated and to accomplish this the apparatus and technique described were used. In fifteen minutes' time a 300 foot length of No. 30 stainless steel wire was fed into the aneurysm and it ceased pulsating. (Fig. 3-b and c).

In conclusion, we feel that this is a simple method of accomplishing what was previously a more formidable procedure both for the patient and the surgeon.

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Cat-Scratch Disease

By Edward L. Quinn, M.D.

Detroit, Michigan

THE NEWLY described clinical entity, Cat-Scratch Disease,[3] is characterized by a localized glandular involvement, frequently related to a cutaneous lesion at the site of a scratch inflicted by a cat. The regional adenitis may proceed to suppuration, with formation of bacteriologically sterile pus, or it may resolve spontaneously without suppuration. Fever and malaise are moderate to absent. Diagnosis is established by a specific skin test with an antigen prepared from the pus from the lymph node of a typical case. Such a case is the subject of this report, the first such case to my knowledge in this area.

Case Presentation

Case 1.—A. M., aged sixteen, owned two playful cats which frequently scratched and bit her. Two weeks prior to examination, the patient abruptly developed swelling at the angle of the jaw on the right side. For the same length of time, she had a small indurated skin ulceration over the zygoma on the right which she attributed to a cat scratch. Neither lesion changed appreciably in size or in tenderness or in appearance during the two-week observation. She was not aware that she had had any fever and had otherwise felt perfectly well. The first clinician who saw her suspected tularemia.

Examination at the Henry Ford Hospital, January 12, 1952. (Fig. 1A) revealed an elastic, non-tender, moderately enlarged gland (2 x 3 cm.) at the angle of the right jaw. Over the right zygoma there was a non-tender, short, linear, crusted ulceration with mild erythema about it. Smears and culture of a drop of sero-purulent material from the skin lesion were bacteriologically negative. The temperature was normal and the physical examination otherwise essentially negative.

Complete blood count was normal and tularemia and brucella abortus agglutination were negative.

Terramycin, 500 mg. four times daily for seven days, was administered during the third week of the disease, with regression of the lymphadenitis by about 50 per cent, and with almost complete disappearance of the skin lesion. The size and elastic character of the enlarged node then remained unchanged. A lack of fluctuation led to postponement of surgical drainage and the institution of a second course of Terramycin during the fifth week of the illness. Gradual improvement ensued and by the end of the eighth week (Fig. 1B) of illness the lesions had entirely regressed.

From the Department of Medicine, Infectious Disease Division, Henry Ford Hospital, Detroit, Michigan. Presented at the Henry Ford Hospital Medical Association Biennial Meeting, May 9-10, 1952.

Through the courtesy of Dr. Worth B. Daniels and Dr. Frank G. MacMurray, Washington, D. C., who furnished us with some antigen made from a typical case of cat-scratch disease, an intradermal test was applied four months after the onset of the disease. After forty-eight hours this showed a minute papule, 3 to 4 mm. diameter, with a surrounding zone of erythema. The clinical picture and the positive skin test makes the diagnosis of cat-scratch disease virtually certain.



Fig. 1.

Discussion

Historically, the first case of cat-scratch disease was published in January, 1950, by Debre, of Paris.[3] Dr. Lee Foshay,[4] of Cincinnati, in his studies on tularemia had noted, but had not published, a "score or more" of such cases during the previous twenty years. Dr. Foshay's cases were characterized by sterile pus, negative serologic tests for tularemia, and a positive skin test to antigen prepared from the aspirated pus. This antigen was negative in control subjects.

Debre had visited Foshay in 1947 and realized his cases were similar to the American cases and later proved that they reacted positively to the Foshay antigen as well as to an antigen prepared from his cases in France. Within the year after his publication about 100 cases were reported in France.

In the first American report in October, 1950, Greer and Keefer,[5] described one patient and in May, 1951, Daniels and MacMurray[1] described twelve additional cases.

In April, 1952, Daniels and MacMurray[2] summarized the clinical findings in sixty patients which they had collected in the past year from fifteen states in the United States, Canada and Hawaii. Briefly, in these sixty patients, fifty-five had cat contact; thirty-three had a cat scratch; three had

a cat bite; sixteen were involved in seven household epidemics; suppuration occurred in thirty-three per cent; the lymphadenopathy persisted from two to twenty-six weeks, average six weeks.

Of fourteen batches of antigen prepared, some gave strong and some weak reactions necessitating standardization on a control patient. Pathologically the nodes revealed hyperplasia of the reticulo-endothelial elements, necrosis and epitheloid cells. Sulfonamides, penicillin and streptomycin seemed ineffectual; chloromycetin and aureomycin seemed to shorten the course and prevent suppuration.

The skin test utilizes the principle of the original Frei test. Pus from a typical case, diluted one part with five parts isotonic sodium chloride, is heated at 56°C. for one hour on two successive days. The test is performed by injection intradermally of 0.1 cc. of this material and read in forty-eight hours, a positive reaction being comparable to the tuberculin test.

Search for an etiologic agent[1,6,7] has apparently excluded the known bacteria, fungi, virus and animal parasites and led to the belief that the condition is probably due to an unknown virus. The disease cannot be transmitted to cats and since those cats suspected of having transmitted the disease have negative skin tests, the cat probably transfers the etiological agent only passively. Inoculation by inanimate objects contacted by cats in the absence of cat scratch has been recorded, i.e., thorns and wood splinters. Other assumed means of transmission are injury to the skin by a beef bone, mosquito bite, and laceration while butchering pork.

Positive transmission experiments to monkeys[7] and one of four human volunteers[6] have been recorded. Some serologic relationship to the lymphogranuloma-psittacosis group of viruses is suggested by the complement fixation test, but the Frei test is negative in patients with cat-scratch disease.

Summary

A case of cat-scratch disease from this area is the subject of this report.

Cat-scratch disease should be suspected in any case of unexplained regional lymphadenitis.

Addendum

Since submitting this case report for publication, four additional cases of cat-scratch disease have been seen at the Henry Ford Hospital, three of the cases occurring as part of a household epidemic.

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MYOCARDIAL INFARCTION

(Continued from Page 68)

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University Hospital

Medicine in the Spotlight

The Clinical Session of the American Medical Association was held in the beautiful city of Denver early in December, 1952. It may be held in Michigan—Detroit—in the not too distant future, if new facilities for housing a large meeting of this kind are developed. But even this mid-year meeting is well attended by over 6,000 M.D.'s and associated individuals so that acting as host is a major undertaking and must be planned well in advance.

These remarks on the physical proportions of this prominent meeting of medicine is symbolic of the fact that our activities, scientific and sociologic, are very much in the public eye. As revealed in an editorial in the *Denver Post,* we are an "embattled profession" and after perhaps a slow start, we have emerged as a formidable foe to socialism, in general, and to centralized government control of medicine, in particular. It seems to be generally recognized that the imminent threat of government medicine is relieved but by no means ended. We have been aided in this and other battles by public opinion, an expression of faith in the free doctor. But we are also reminded that the socio-economic factors in medical care are of immense importance to the patient and to those we must keep attuned.

For one thing, the group surgical, medical and hospital care plans without doubt have aided tremendously in postponing the demand for socialized medicine and therefore merit our co-operation. It is not enough, however, to urge the use of these plans by our patients. We must sell ourselves to participate in them as evidence of our good faith and gratitude for public support. There are, of course, other facets to our efforts in public relations, but they may be more clearly delineated if each of us does the most possible for our patient at all times.

President's Message



R. J. Hubbell

President, Michigan
State Medical Society

Editorial

A NEW YEAR—RENEWED PROBLEMS

WITH the dawning of a new year, we are always stimulated to attack new problems and to make renewed efforts to solve old ones. The installation of a new Administration in Washington and a new political alignment of the Congress prompts us to review some projects of the past with a hope of better results in the future.

SELF-ESTABLISHED SECURITY

FREQUENTLY since September, 1945, this editor has invited attention to the failure of our federal laws to give the same preference to professional men as it does to industrial employes. Independently practicing doctors of medicine, attorneys at law, dentists, architects, and others are forbidden the opportunity granted to industrial workers to have a part of their income invested in specified securities or insurance plans whereby up to 15 per cent of earnings may be set aside to furnish an income in later life, after the best earning years are past. This amount so invested is to be exempt from income taxes until it is returned to the investor as annuities or allowances. Something of this nature was attempted by the last Congress under the Keogh-Reed Bills (H.R. 8390 and H.R. 8391).

There is no just reason why professional people should not be permitted to set aside 10 or 15 per cent of their incomes tax-free to purchase certain specially designated government bonds which will mature at the retirement of the purchasing individual. They would thus be allowed to establish estates for their old age, instead of paying most of their income for income taxes. The Government would not lose in the long run, for while it would not collect the percentage of the income as it was being earned, the Government would get the use of the whole investment for the years pending retirement. That could be at a very small interest rate, if the Congress so specified. As the accumulations are being paid back to the investor, he would necessarily be required to pay income taxes, either at his newly established rate, or if Congress should choose, it could establish the income tax as of the rate in force when the trust was set up.

OLD AGE SOCIAL SECURITY BENEFITS

ANOTHER federal tax and payment plan which needs attention is the administration of the Social Security old age benefits. The law has been amended several times. At first a beneficiary drawing on his Social Security got $15.00 a month. If he earned more than $14.99, he forfeited all benefits. That law was changed, making the benefits $50.00 per month, still retaining the forfeiture clause if the conscientious citizen tried to eek out a living for himself by supplementing the meager allowances given by the law. Many such persons were summarily removed from the rolls and kept off for indefinite periods.

Later, the law was amended so that if a person is over seventy-five years of age and still able to do a little work, he may do so without forfeiting his benefits. Recently, the allowances have been increased, until the maximum is about $80.00 a month, with half that amount for the spouse, if alive.

The Government claims this Social Security is a true and adequate insurance proposition, and that on the average a man who has been under the plan for a minimum of an indefinite number of years will have paid into the Treasury of the United States enough to carry his benefits for the rest of his life. If that is true, there is no excuse or justification for the Government to deny any beneficiary his benefits, because he has been willing and able to earn a little extra money in his old age and compulsory retirement.

These old people did not ask to be taken out of their regular employment. The very fact of their willingness to continue paying their own way, in so far as they are allowed, testifies to their worthiness. Thoughtful attention is their due from the new powers of government in Washington.

HEALTH SURVEYS

ONE of the projects advocated for a great many years by the medical profession has been the periodic health survey that each individual should undergo. The American Medical Association has advocated such examinations as long as most of the present practitioners can remember. Industry adopted the plan to its advantage.

One of the mainspring projects of the Michigan State Medical Society during the year just past was the "Formula for Freedom." It had three fundamental elements: "Know Yourself," "Know How to Live," and "Know Your Government." Many county and district assemblies have been held to develop and spread the program throughout the State. The first topic, "Know Yourself," was broken down into two parts: (1) (a) Periodic Health Appraisal, (b) Social-Religious Appraisal, (c) Economic Appraisal, (d) Legal Appraisal; (2) Joint effort by all voluntary health organizations to emphasize in their educational and promotional efforts the importance of the general health of the complete individual as opposed to the emphasis on a single examination for a specific disease. To this tenet the Michigan State Medical Society has been pledged.

The older members of our profession will remember that at the close of the first World War President Woodrow Wilson made a tour of the United States urging support of his proposed Treaty of Peace with the Central Powers, which would set up a League of Nations. During that trip he was stricken with an illness which prevented him from meeting with his cabinet and carrying on the functions of government. He did sign papers, but all contacts were by and through his wife. In effect, she was the President for about a year of Wilson's second term. He never regained his health.

Only a few years later, President Warren G. Harding made an exhausting trip through the Northwest, including Alaska, and died soon after returning to the West Coast. He had a "heart attack." Possibly he should not have made that trip.

President Franklin D. Roosevelt ran for the fourth term after his personal physician, a Navy admiral, had assured the American public that he had made careful examination of the President and could testify that the President was in sound health. Actually, he was a dying man, and passed away only a short time after his inauguration.

Another President's term is drawing to a close; in fact, it will be ended when this editorial appears in print. All have watched this President's progress through the past seven years, and in the recent ones some have wondered what the state of his health might be. He has seemed always to have an answer to every problem, no matter how big; he has not taken well to advice, or sought advice in many instances when he should. His term is over, and another is just beginning. We therefore cannot be charged with politics, if we make a suggestion.

There is no provision in our government for carrying on the functions of the Presidency in case the President is incapacitated temporarily. Many people believe there should be a periodic appraisal of the President's health. This should not be made by a politically appointed or selected medical man. The regular care of the President's health is his own personal privilege, and he is entitled to his own private physician, be he an officer of the Army, Navy, or a civilian. There is an element of personal or political bias in that selection. That is the President's right as a free citizen.

But the President is not a free citizen, insofar as he is President of the United States. He owes his best service to the people of this country. Some plan should be set up by Congress providing for an independent non-political, appointment-free commission which shall periodically and at sufficiently frequent intervals make a thorough study of the President's health, mental and physical, to determine whether he is able and capable to carry on his arduous work. If found sound, the Commission shall so report; if found temporarily incapacitated, his duties could temporarily be assumed by the Vice President. If found permanently disabled, some provision should be made for an independent confirmation of that finding, in which case the Vice President should take over.

This is a ticklish problem, and will challenge the Congress for a satisfactory adjustment.

This suggestion, or one of a similar nature, is a just and immediate need. The duties of the Presidency have increased to such a great extent that a man of iron is needed. Too many of our Presidents in these later years have suffered from human frailties that might have been tempered by just and adequate attention to the needs of a human being.

The President is a living symbol of our government, and essential to the proper function of the government. We must protect his health, and also protect ourselves from the dangers which might develop if the burdens should prove too great.

This editorial suggestion has been postponed for a long time, until it could be written without the implication of a political slant. That cannot be the case now. Our new President, with his military background, is perfectly familiar with the need of periodic check-ups.



Heart Beats

Frank N. Wilson — In Memoriam

By Franklin D. Johnston, M.D.
Ann Arbor, Michigan

In thoughtful tribute the Michigan Heart Association, upon invitation of the Michigan State Medical Society, dedicates this Annual Heart Number of The Journal *to one of Michigan's outstanding men of medicine—Frank N. Wilson, M.D.*

The death of Frank N. Wilson, M.D., on September 11, 1952, brought to an end the career of a great scientist, teacher and physician. It is quite proper that this Number of The Journal be dedicated to this man who did so much in his chosen field. He not only brought distinction to himself but added immeasurably to the reputation of medicine in this State and to that of the University of Michigan Medical School.

He was born near Detroit, Michigan, on November 19, 1890, and except for two short periods of service at Washington University in St. Louis, Missouri, before and after the first World War, resided in Michigan all of his life. Soon after graduation from the University of Michigan Medical School in 1913 he was encouraged by the late A. W. Hewlett, M.D., then head of the Department of Internal Medicine in University Hospital, to begin the study of electrocardiography. He soon became completely absorbed in this work, and as time went on electrocardiographic research occupied more and more of his intellectual life. Research to Doctor Wilson was never an activity which one turns on as they enter the laboratory and switches off on leaving for home.

When Doctor Hewlett left Ann Arbor in 1916 to take a position at Leland Stanford University, Doctor Wilson accepted a post at Washington University, in St. Louis. In the spring of 1917 he entered military service and was assigned to work with Sir Thomas Lewis at Colchester, England. The unit at Colchester was established to study effort syndrome occurring in British soldiers and, during the two years that Doctor Wilson served with this group, lasting friendships began with Sir Thomas and several American, British and Canadian physicians. Of the other Americans in the Unit, Doctor Wilson became especially attached to Samuel A. Levine, M.D., and they became very close friends. Sir Thomas recognized the great ability of Doctor Wilson and singled him out for special instruction and attention. Not only were technical subjects including electrocardiography discussed by these two great men, but lighter matters like the study of birds and their photography were interspersed. Doctor Lewis was an expert in ornithology and gave to Doctor Wilson much of the interest and enjoyment in this hobby which remained with him ever after.

To Michigan in 1921

Upon his return to the United States in the fall of 1919, Doctor Wilson resumed work in St. Louis and soon was engaged with George R. Herrmann, M.D., in an important experimental study of bundle branch block and electrocardiographic and pathologic observations in patients with ventricular hypertrophy. Some of this work was not finished and the reports were not published until after 1921 when Doctor Wilson returned to Ann Arbor as Associate Professor of Internal Medicine. At this time, the present University Hospital was being built and the Heart Station was designed and equipped in accord with Doctor Wilson's wishes and advice. When the Hospital was completed in 1925, good equipment and adequate space were available to Doctor Wilson for the first time. A large electrocardiograph employing a string galvanometer was mounted permanently in the main work room in the Heart Station and for over ten years most electrocardiograms taken on in-patients were obtained over the extensive wiring system that connected all parts of the Hospital with the Heart Station. This somewhat unique arrangement

worked well for a time, but progressive difficulties arose, so in 1936 a mobile electrocardiograph was purchased and the use of the wiring throughout the Hospital was largely abandoned.

As a result of a long period of negotiation and much correspondence between Doctor Wilson and the great Dutch physicist, Wilhelm Einthoven, a large double string galvanometer with the two units in tandem was available soon after the Heart Station opened. This fine piece of equipment, designed by and constructed under the supervision of Doctor Einthoven, made possible many important clinical and experimental studies carried out by Doctor Wilson and his associates during subsequent years.

Routine clinical work took a great deal of Doctor Wilson's time for several years after his return to Ann Arbor in 1921, but following an illness that lasted for nearly two years in the late twenties he requested relief from much clinical responsibility and entered the most productive period of his life. While Doctor Wilson was ill a very important electrocardiographic study was carried out by Doctors Paul S. Barker, A. G. MacLeod and John Alexander, which included, among other things, the registration of premature beats produced by stimulation of accurately located points on the exposed human heart. This work made Doctor Wilson realize that the long accepted ideas about bundle branch block were probably incorrect, and he promptly carried out beautiful experimental and clinical studies which proved beyond question that tracings previously considered to be due to right branch block were actually due to left branch block and vice versa. It is of considerable interest that, in the course of this work, multiple precordial leads were systematically used for the first time in man.

First Described the Ventricular Gradient

At nearly this same time Doctor Wilson devised the central terminal circuit for the registration of "unipolar electrocardiograms," and shortly thereafter described an entirely new and important concept, that of the ventricular gradient. Although both of these studies are of much theoretical interest, the former has proved to have great practical value as well. The central terminal arrangement is the basic circuit nearly universally used in taking "unipolar electrocardiograms" as we know them today. This work was followed by clinical and experimental electrocardiographic studies on myocardial infarction. Although many details have been added by others, a great deal of the basic knowledge we possess in this important field stems directly from Doctor Wilson's early work. Many of his later investigations and papers were devoted to the use of the precordial electrocardiogram and other special leads but there is hardly any corner of electrocardiography that has not been enriched and clarified by his genius.

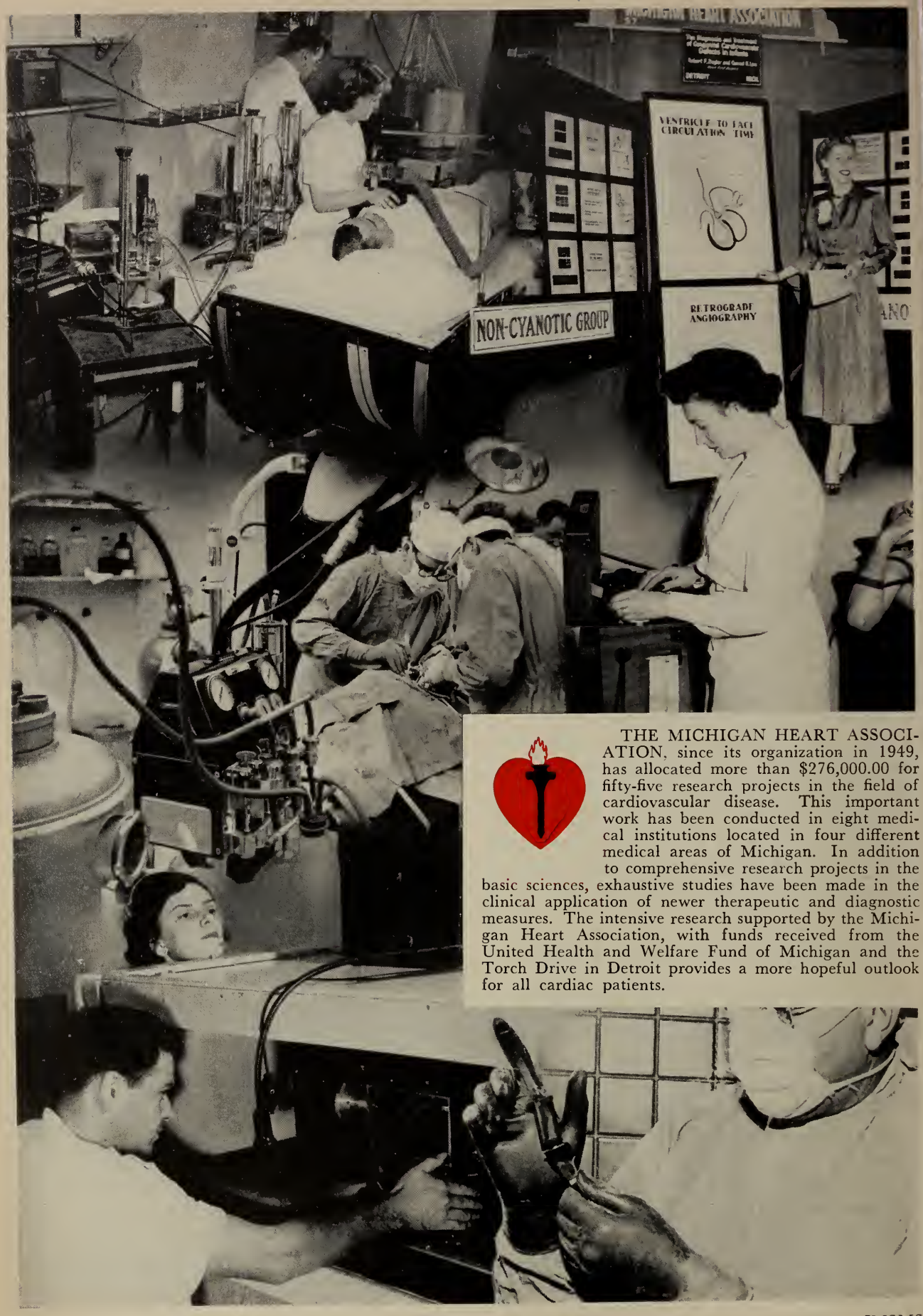
Doctor Wilson wrote over one hundred papers, mostly on the electrocardiogram, but his contributions as a teacher were of even greater value. For nearly twenty years, he gave an annual postgraduate course in electrocardiography which attracted doctors of medicine in increasing numbers to Ann Arbor. In addition to this formal course, a great many physicians from all over the world spent varying periods of time in the Heart Station studying under Doctor Wilson. Although this informal type of instruction took a great deal of time, which he would have prefered to use in other ways, he seldom said "no" to a doctor of medicine who wished to work in the Heart Station. In all his teaching Doctor Wilson emphasized the many things apart from heart disease that may influence these electrical records, and he did a great service to physicians and patients by insisting on an intelligent and conservative attitude in their interpretation.

A Physician's Physician

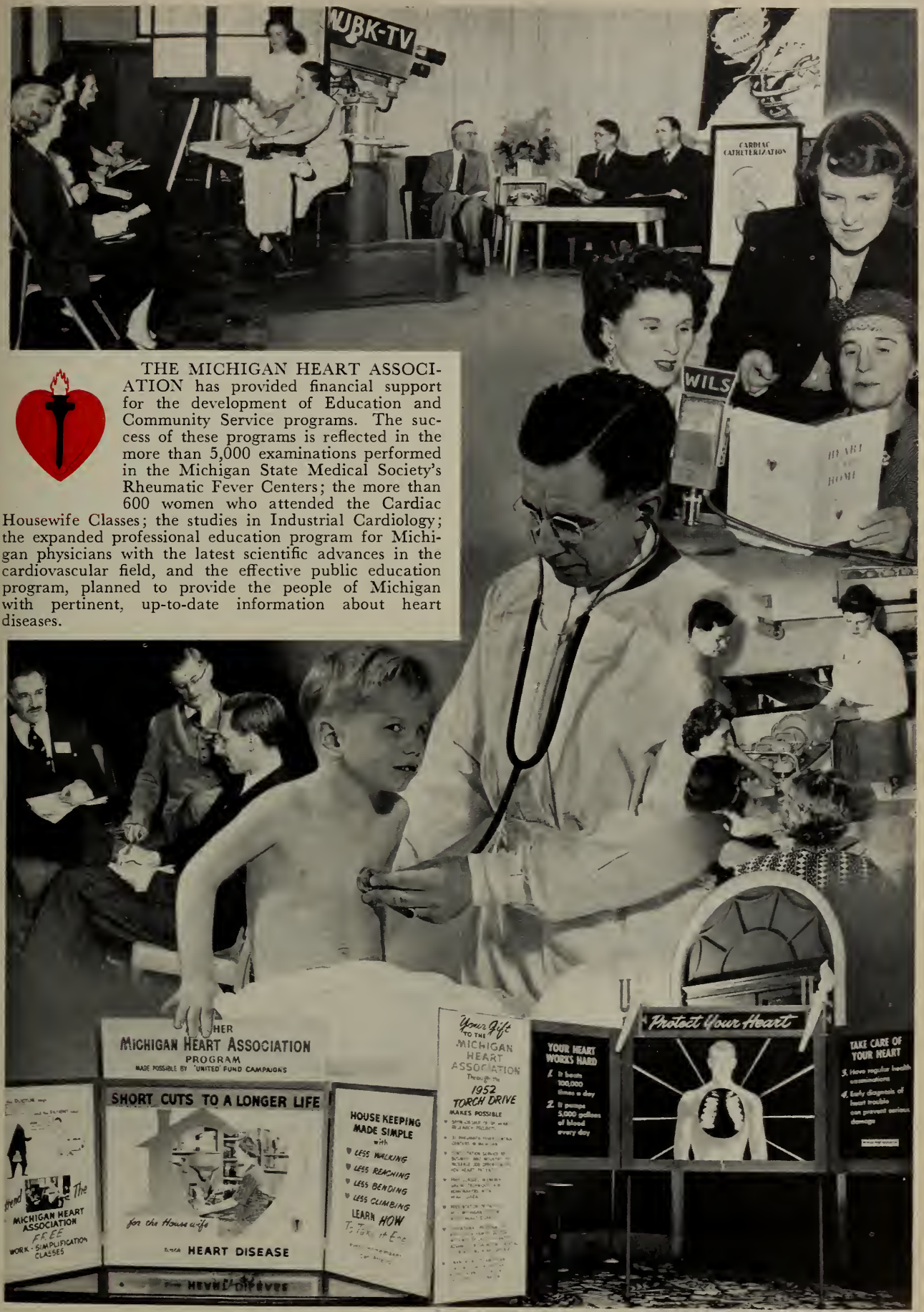
Many practitioners in Michigan remember Doctor Wilson not as an expert in electrocardiography but as a skilled physician who helped them in the care of their cardiac patients. He used the same fundamental approach in studying patients as he did in his electrocradiographic work and was often able to suggest a diagnosis or treatment which had not occurred to the attending physician. Many of these doctors of medicine came to Doctor Wilson for professional advice themselves and in his later years he was truly a physician's physician. He always took the time to inquire into the details of the history and to do a careful and complete examination. After the examination was finished he invariably talked the problem over with the patient and regardless of the nature of his opinion his calm and kindly attitude always brought reassurance and confidence.

Chronic illness forced Doctor Wilson's retirement from active work in the Heart Station in Novem-

(Continued on Page 110)



THE MICHIGAN HEART ASSOCIATION, since its organization in 1949, has allocated more than $276,000.00 for fifty-five research projects in the field of cardiovascular disease. This important work has been conducted in eight medical institutions located in four different medical areas of Michigan. In addition to comprehensive research projects in the basic sciences, exhaustive studies have been made in the clinical application of newer therapeutic and diagnostic measures. The intensive research supported by the Michigan Heart Association, with funds received from the United Health and Welfare Fund of Michigan and the Torch Drive in Detroit provides a more hopeful outlook for all cardiac patients.



THE MICHIGAN HEART ASSOCIATION has provided financial support for the development of Education and Community Service programs. The success of these programs is reflected in the more than 5,000 examinations performed in the Michigan State Medical Society's Rheumatic Fever Centers; the more than 600 women who attended the Cardiac Housewife Classes; the studies in Industrial Cardiology; the expanded professional education program for Michigan physicians with the latest scientific advances in the cardiovascular field, and the effective public education program, planned to provide the people of Michigan with pertinent, up-to-date information about heart diseases.

Michigan Heart Association

Summary Report on Research Project, 1951-1952

One of the chief aims of the Michigan Heart Association is to stimulate and support research in cardiovascular diseases. Its other important responsibilities are in the fields of Education (professional and public) and Community Service.

The following are reports of progress made during the fiscal year 1951-52 by investigators working in Michigan under the sponsorship of the Michigan Heart Association through funds received in "United" campaigns.

WAYNE UNIVERSITY COLLEGE OF MEDICINE—Gordon B. Myers, M.D. $23,200.00

This is a continuation of previous work which has now crystallized into three main channels and is being continued in 1952-1953 as individual grants to the investigators named below under the over-all supervision of Dr. Gordon B. Myers.

(a) Lloyd T. Iseri, M.D.—"Metabolic Aspects of Cardiorenal Diseases."

Six scientific papers have been written and published, including one in the Heart Issue of The Journal MSMS of December 1951. One additional paper is in press and a paper dealing with Sodium and Potassium Metabolism in salt-losing nephritis has been submitted for publication. The data for seven cases studied completely for water, potassium, and chloride indicate a slight but constant decrease in water, a distinct increase in potassium, a distinct decrease of chloride content of muscle tissue after compensation of congestive heart failure. These data were obtained by muscle biopsy studies and are being continued with the hope that there will be more conclusive data with regard to sodium as well as to potassium and chloride.

(b) Harper K. Hellems, M.D.—"Hemodynamic Aspects of Cardiorenal Diseases."

Using the technique of the cardiac catheter, the role of vasomotor activity in the control of the pulmonary circulation has been studied in thirteen dogs. Various vasomotor drugs are being studied to determine if vasomotor control of the arterioles plays any role in the pulmonary circulation. In addition, patients with sickle cell anemia have been studied to determine the nature of the cardiac pathology observed in these patients. It was found that arterial oxygen saturation was at low levels in each of the eleven patients studied. This unexpected finding is being further pursued in the attempt to unravel this still incompletely understood disorder.

Preliminary work in developing techniques of measuring myocardial blood flow and metabolism have been worked out. During the coming year, the major effort of the laboratory will be devoted to this problem.

In addition to the above experimental work, studies and follow-up of patients who have had mitral valve surgery are continuing on the twenty patients who have been operated on to date.

A manuscript on this topic has been accepted for publication in S. G. & O. Two other manuscripts are in preparation for publication. Two papers have been presented: one at the American Heart Association meeting in Cleveland and the other to be presented at the Regional Meeting of the College of Physicians. It has been found that there is a good correlation between increase in the calculated mitral valve size following surgery and clinical improvement. The data also suggests that some patients undergoing this surgery may reclose their mitral valves. These patients have shown a relapse following transitory improvement. This work will be reported at the Fourth Annual Michigan Heart Day, March 13, 1953.

(c) Albert J. Boyle, M.D.—"Chemical Aspects of Arteriosclerosis and Cardiorenal Diseases."

Five new articles have been published or accepted. The work to date shows a relationship between clotting time of plasma and turbidity appearance of serum when certain chemical elements are added. In addition, there were found marked differences between the time required for turbidity appearance in samples from arteriosclerotic as opposed to normal subjects. This time difference may be directly related to particle size of serum proteins. New methods of chemical analysis of various blood salts have been developed, also a procedure for estimating chelating agents in the urine which will be used in the animal study of arteriosclerosis.

HARPER HOSPITAL—F. D. Dodrill, M.D. $6,000.00
"Mechanical Heart-Lung Mechanism"

During the year, seventy-six animal experiments have been carried out substituting the mechanical heart-lung mechanism for the right heart, for the left heart, and for both ventricles using both the natural lungs and an artificial oxygenating machine. On the left side, the mitral valve has been exposed in the living animal; and in the last eight exposures, all animals have survived.

A publication dealing with original observations on this problem will appear shortly. Dr. Dodrill will speak on this subject at the next Heart Day, March 13, 1953.

It would appear from the experimental work that application of the artificial heart-mechanism to human surgery may be in the near future.

UNIVERSITY OF MICHIGAN—James L. Wilson, M.D. $6,000.00

"Investigation of the Effects of Cyanotic Heart Disease and its Relief on Cerebral Function"

This is a continuation of the investigation of congenital heart disease and particularly of the mental improvement resulting from surgical correction. During the year, 125 new patients were seen. Certain of these were added to the group under study for the effects of chronic cerebral anoxia associated with the cyanotic (blue baby) heart conditions and its relief through appropriate cardiac surgery. A remarkable psychic change was seen in those who had successful surgery, having shown an entirely new confidence in their ability to do things, looking as though the weight of the world had been removed from their shoulders. Several of the better surgical results have had a definite rise in their intelligence quotients.

An article was published by Drs. Melvin Figley, Fred J. Hodges, Aaron Stern and James L. Wilson in the last Heart Issue of the State Journal, dealing with the use of angiocardiography as a diagnostic aid in these conditions.

The investigator reported that this grant has been of great value in raising the level of understanding of congenital heart disease, its diagnosis and treatment.

HENRY FORD HOSPITAL—Conrad Lam, M.D. $6,000.00

"Experimental Cardiovascular Surgery"

The following problems have been investigated in the Surgical Research Laboratory of the Henry Ford Hospital:

1. Rectus Sheath Grafts in Vascular Repair: It was found that pieces of the posterior sheath of the rectus abdominis muscle could be used to make tubes or patches for the repair of arteries. This work was reported in a paper to the Central Surgical Association at Toronto, March 7, 1952, and has been published in the *Archives of Surgery.*

2. Sterilization of Arterial Homografts: Several sterilizing chemicals have been investigated to see if they could be used to make routine autopsy specimens useful for implantation when arterial grafts are needed. The agent diacetylethylene was found unsuitable, but very promising results have been obtained with betapropiolactone.

3. Application of the Hathaway Electronic Pressure Recording System to Experimental and Clinical Cardiovascular Surgery: A paper describing the pressure changes in the pulmonary artery and left auricle in thirty-eight patients undergoing surgery of the mitral valve was read at the meeting of the International Society of Surgery in Paris, September, 1951.

4. Efforts to By-pass One or More Sides of the Heart: It was found to be possible to create an anastomosis between the superior vena cava and the right main pulmonary artery, thus shunting blood from the superior part of the body directly into the right lung without passing through the right side of the heart.

5. Experimental Surgery of the Aortic Valves: A paper was published in Surgery, Gynecology and Obstetrics describing the results when aortic valves are grafted from one animal to another. These valves function only temporarily, possibly because the recipient animals did not have permanent insufficiency of their own valves. Further studies of the spontaneous healing of traumatic lesions of the aortic valves are being carried out.

HENRY FORD HOSPITAL—B. E. Goodrich, M.D. $500.00

"Protamine Studies"

This grant was originally approved in August 1949 in the sum of $3,000.00 for the purpose of studying the effect of protamine, such as found in commercial protamine zinc insulin, on the coagulation time of the blood of patients receiving this medication, as well as animal studies. Blood protamine studies were made as well as clotting time during various medications given to diabetic patients. A paper reporting these studies was published in the Journal of Laboratory and Clinical Medicine. Additional studies were contemplated, dealing with the variations in blood clotting mechanism in connection with acute cardiac infarction. An additional $500.00 was allocated for this purpose in July, 1951. Since then there has been almost no activity because of the lack of technical help. Technical assistance has just become available and the studies are being resumed.

UNIVERSITY OF MICHIGAN—Franklin D. Johnston, M.D. $2,500.00

"Special Electrocardiographic Studies and Cardiac Vibrations"

This has been a continuation of the study of low frequency vibrations over the heart. A preliminary report has been published in *Circulation,* April, 1951. In addition, studies of electrocardiographic leads utilizing fluid mappers have been pursued. Preliminary reports of this work were submitted to the Central Society for Clinical Research in October, 1951. A paper on this subject was published in *Circulation,* July, 1952.

Two new techniques have been developed by Dr. Stow, to whom this entire allocation has gone in the form of a salary in his capacity as Research Associate. A switch has been developed to obtain E.K.G. tracings which depict the voltage throughout the 360 degrees of the Einthoven triangle. The other is an electronic circuit to make it possible for the physician to hear low frequency vibrations which are in themselves in the subaudible range. This involves an entirely new method of auscultation, and it may or it may not be of clinical value.

Dr. Johnston presented a paper on the Use of the Electrocardiogram at the Michigan Heart Day in March, 1952.

UNIVERSITY OF MICHIGAN—Sibley W. Hoobler, M.D. $5,400.00

"Pressor Substances in Hypertension"

Increasingly sensitive methods for detecting the presence of substances in the blood which cause elevation in

blood pressure have been perfected. The artificial kidney which was used in this connection was a bulky and complex mechanism. It has now been replaced by a simpler ultra-filter. The detection of pressor substances has been greatly improved by the adoption of a new carotid segment technique, and it has been possible in a few cases to pick up specific constriction activity directly from the blood of patients receiving infusions of small amounts of arterenol. It is expected that real progress will be made in the next few months on this project. The method for measuring vasocative substances was reported by Dr. Wendell Kingsolver at the Spring meeting of the Federal Society for Biology and Medicine and will be published at a later date. Dr. Hoobler presented a paper on "The Modern Drug Therapy of Hypertension" at Heart Day in March, 1952.

CHILDREN'S HOSPITAL OF MICHIGAN—Paul V. Woolley, Jr., M.D. $5,000.00

"Use of ACTH and Cortisone in Rheumatic Fever"

The effects of ACTH and Cortisone on acute rheumatic fever have been observed on a large series of patients. They were reported in a paper read by Dr. Manes Hecht at the Third Annual Michigan Heart Day and will be published in the forthcoming Heart Issue of The Journal MSMS. This work is being continued both on new cases and as a follow-up on cases already treated.

BLODGETT MEMORIAL HOSPITAL — Noyes L. Avery, M.D. $1,000.00

"Use of ACTH and Cortisone in Rheumatic Fever"

One additional patient with rheumatic fever has been studied and follow-up studies have been done on five patients.

HENRY FORD HOSPITAL—Joseph A. Johnston, M.D. $5,000.00

"Nutritional Studies in Rheumatic Fever and Rheumatoid Arthritis"

The metabolism of fifteen subjects were studied by the balance method, some for as long as three months. The observations concerning the first six of these were published in the *American Journal of Diseases of Children.*

The effect of graded exercise in convalescence from rheumatic fever was observed. The nitrogen balance had been negative due in part from inactivity. Small amounts of exercise resulted in increased storage of nitrogen and marked increase in the storage of calcium. There is a useful principle involved here which was demonstrated previously in tuberculosis that carefully supervised exercise in small amounts can be a useful adjunct to offset the disuse atrophy resulting from too prolonged bed rest. Further studies on the total effect of cortisone in rheumatic fever were conducted. Metabolic losses during prolonged administration are quickly regained. In one individual, the net result was a gain in nitrogen in spite of losses during administration of the hormone, something which the author feels is a permanent contribution to growth and ability to cope with recurrences.

HURLEY HOSPITAL — M. S. Chambers, M.D. $1,000.00

"The Flicker Photometer"

The study of the flicker photometer has been completed and a paper will be published in the *American Heart Journal.* The previously described efficiency of this mechanism in the detection of arterial and especially coronary artery disease has not been substantiated.

HENRY FORD HOSPITAL—B. E. Goodrich, M.D. $1,000.00

"Blood Oxygenation During Angina Pectoris"

Technical assistance to carry on these studies has just become available so that the project is now being actively carried out and consequently no report can be made.

UNIVERSITY OF MICHIGAN—F. E. Shideman, M.D. $4,000.00

"Energy Sources for the Renal Tubular Transport of Sodium"

This study into the energy sources in the renal tubular transport of sodium may be divided into two parts. These have to do with the mechanism involved in the production of ammonia in the kidney and the screening of compounds for their ability to inhibit ammonia formation from certain amino acids by enzyme substances. A number of inhibitors of intermediary metabolism have been studied in relation to their effects upon sodium excretion in the dog. This approach was made in an attempt to find a chemical agent sufficiently potent and selective to reduce the production of ammonia in the kidney, thus a great loss of fixed base, i.e., sodium, and with it water could be achieved. The net result of this would be to find a new method of treatment for the prevention and/or treatment of dropsy. A great number of compounds were studied for these effects and several promising avenues have been opened up but are in need of further study.

Dr. Shideman has accepted the position of Professor of Pharmacology at the University of Wisconsin and left the University of Michigan on August 31, 1952. The University has advised us that this project will, therefore, be terminated as of September 1, 1952, but this work is being continued by Dr. Shideman at the University of Wisconsin under support from the Wisconsin Heart Association.

UNIVERSITY OF MICHIGAN—Cameron Haight, M.D. $1,700.00

"The Function of the Respiratory System as Influenced by Heart Disease and a Correlation of Pulmonary and Cardiac Function Before and After Pulmonary Resection"

This grant has provided a fellowship to Dr. Delbert D. Neis. Experimental work in performing intra-pericardial aorta-pulmonary shunts in congenital heart disease is being studied. This study was undertaken because of lack of equipment needed for the proposed study on the function of the respiratory system as influenced by heart disease and a detailed study of the heart in patients before and after pulmonary surgery. The necessary equipment has arrived and the study is being conducted as originally proposed.

WAYNE UNIVERSITY COLLEGE OF MEDICINE—Professor Fred Rights. $500.00

"Virus Etiology of Pericarditis and Myocarditis"

A single case has been studied to date and no infectious agent has been found. Two other cases were restudied in great detail, but no infectious agent was found. Because of the dearth of clinical material, this investigator has been allowed to retain these funds in his possession for the coming year.

UNIVERSITY OF MICHIGAN—Professor George Granger Brown. $1,320.00

"Fundamental Principles of the Streaming Potential Concept"

This grant has made possible a fellowship for Mr. Philip E. Bocquet. A fundamental study has been made of the basic principles of the streaming potential concept. It is felt that substantial progress has been made in clarifying the basic principles pertaining to the streaming potential concept and that these may be in time applied to physiological problems involving fluid flow measurements. It is noteworthy that this grant to the Department of Chemical and Metallurgical Engineering of the University of Michigan is instrumental in developing new tools in physiological measurement.

WAYNE UNIVERSITY COLLEGE OF MEDICINE—Professor Fred Rights. $330.00

"A Study Designed to Detect the Presence of Circulating Tissue Antigens That May Be Induced in the Rat Following Streptococcal Infection"

The project is now in progress. New animals and supplies have all been purchased. A report is expected shortly.

HARPER HOSPITAL — Robert A. Gerisch, M.D. $1,500.00

"A Study of the Effects of Cortisone Upon Experimentally Produced Myocardial Infarcts"

This sum was completely expended to provide a fellowship for Dr. Robert Gerisch to assist in the continuation of studies begun through finances from other sources. These studies have entailed the use of ACTH and Cortisone upon experimentally produced myocardial infarction.

It was found that there is an increase in blood supply to the heart when the hormones were used and a decrease in the mortality rate. Microscopic studies showed less cardiac damage and fewer thromboses in the treated specimens.

This work was presented at the last Meeting of the American Medical Asociation and the exhibit was awarded a certificate of merit. A paper has been submitted and has been accepted by *Circulation.*

A plan for the clinical investigation of these hormones has been prepared.

STUDIES WITH THE FLICKER PHOTOMETER

(Continued from Page 56)

Conclusions

1. Tests with proper apparatus and technique indicate that the flicker photometer is a satisfactory instrument both from the standpoint of accuracy of calibration and reproducibility of frequency of flashes at a given setting of the dial.

2. Nitroglycerine flicker tests done on sixty-seven normal subjects showed a small but significant number (4-6 per cent) of positive tests.

3. Flicker fusion tests carried out on eleven patients with known coronary artery disease were all negative.

4. It is concluded that, although the flicker photometer itself is a good and accurate instrument, the flicker fusion test as advocated by Krasno and Ivy may not be a reliable test for spasm of the retinal arteries, and it should not be used for the diagnosis of heart disease.

The author wishes to thank Mr. Richard McFee for technical studies done with the flicker photometer and Dr. F. D. Johnston for suggestions during the course of the work and for help in the preparation of the paper.

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University Hospital

Earle A. Irvin, M.D., Detroit

President of Industrial Medical Association

He was born as an "Irvin": he was given the name of "Earle": but his fitting name is "Bud." It must fit since everyone uses it, even his wife calls him "Bud." Under any name he was and is destined for a top place whether as a student, an intern, a medical director, or the president of an outstanding national medical association.

My first touch with Bud was in the medical department of Fisher Body Division of General Motors Corporation in Flint. That must have been in 1936. He was only two or three years out of medical school and looked it. Even then he had the glint of zeal in his eyes. His chief spoke fondly of him so that my own interest was piqued. "What has he got? What motivates him?" Those were my questions. The reply was, "Well, he knows medicine as a personality, knows enough to get out in the plant and makes friends there and he looks right at you when he talks." Those words of praise, even though homely, portray the qualities of desirability for any physician seeking to specialize in the practice of industrial health.



To date him, Bud was born in 1908. After some of the usual joys and vicissitudes that attend boyhood, Bud landed in the University of North Dakota in 1926. The year 1929 found him in Ann Arbor at the medical school where he was graduated in 1933.

The first draft of this profile runs "He was married pretty soon after graduation to Olga Joye Hansen." That's not a wrong statement. But let's revise it. "Soon after graduation he was married to pretty Olga Joye Hansen." Now they are four—a boy and a girl complete the tetrad.

Bud's internship was at Hurley Hospital in Flint. That was in 1934. Then the appointment to the Fisher Body plant. Quickly he attracted attention. Soon he was the head of the medical service at the Cleveland plant of Fisher Body making progress at an astonishing tempo. The musicians would attach the word "allegro" to him. In any language "Bud Irvin" means alacrity and liveliness. By that time youthfulness was giving way to maturity. Bud was becoming an administrator. Bud was becoming a salesman—a salesman of everything good, the good of industrial medicine, the good of medicine in industry, the good of Bud Irvin.

About 1941, Bud became associated with one of the major rubber companies in Akron, still in the medical department, but that divorcement from General Motors was temporary. Soon there was a return to his first love. In 1942 he became medical director for the Cadillac Motor Car Division of General Motors Corporation in Detroit. And, there he is to this day, a superb medical director.

The medical department of the Cadillac Motor Car Corporation is different from what he found in 1942. That difference is a portrait of Earle A. Irvin, M.D., industrial physician. Among his many innovations is the emphasis on individualized medical service for the employes of his company—personalized to a degree that little characterizes the average medical department. At the end of World War II he designed the specifications for a physically new medical department which has become earmarked as a practical showpiece for all medical departments. One may wonder where Bud attained those capacities that approach good engineering, good architecture, his sense of compactness, con-

(Continued on Page 92)

A dinner honoring the President of the Industrial Medical Association, Earle A. Irvin, M.D., will be held at the Sheraton-Cadillac Hotel, Detroit, Tuesday, March 10, 1953, at 6:30 p.m.

Harry Monroe Nelson, M.D., Detroit

President, American Cancer Society

Doctor Nelson, better known as Harry to his close friends and medical associates, was born of Danish-American parents, in the little city of Kane, Pennsylvania, in 1895. There were seven little Nelsons to share the bounties of the Nelson home in Kane. It is improbable that any of us in Michigan would have heard of Kane, had it not been for the Nelson family, for Kane is only a dot in the hills of Western Pennsylvania, situated on the edge of coal and gas deposits.



Careers are frequently shaped by coincidence. In Harry's case, his destiny was derived from childhood affection for a high school teacher, who was, one might say, an ambassador from Michigan. This influence directed Harry to the University of Michigan, eventually to its medical school in 1916 and as events have shaped his career, to his adopting Michigan as his permanent home. Harry emphasizes the great credit due to his mother's indomitable spirit to overcome adversity. This driving force is also exemplified in Harry's life, the will to tackle a job and get things done.

There were others in the Nelson family to make Medicine their career. Catherine, training at Michigan and Columbia, is now Superintendent of Nurses in Salem, Massachusetts, and Richard, a younger brother, is a Doctor of Medicine also in Massachusetts.

During World War I, although only a Junior in medical school, Doctor Nelson was asked by Dr. Cyrinus Darling, Professor of Surgery, to serve as an intern due to a shortage of interns. In this way, he was able to defray the expenses of board and room while gaining valuable experience. This was Harry's introduction to medical practice.

After graduation in 1920, he became an instructor in Anatomy and Surgery at the Univerity of Michigan Medical School. In this formative period he was chiefly influenced by the teaching and examples of Dr. Hugh Cabot and Dr. Ruben Peterson. Here he became interested in the specialty of Obstetrics and Gynecology.

In 1923, he came to Henry Ford Hospital as an associate of Dr. Jean Paul Pratt in the practice of Obstetrics and Gynecology and remained until 1931. It was here, while developing in the medical field, that Harry apparently found some time for social activity, because he met the lovely Elizabeth Jones who became associated with the nursing department after graduation in the same institution. Miss Jones, after having taught school, directed her attention to the medical field, through the influence of her father, Dr. Robert J. Jones, one of the founding fellows of the American College of Surgeons. Harry and Elizabeth were married in September, 1927. They have two sons, Harry M. and Robert H. It seems that both boys either will follow their father's profession or his avocation—Harry intending to enter medical school and Robert, Michigan State College to study farming.

The new Woman's Hospital had just been completed in 1929, and Harry, having developed the urge to go on his own, became associated with this institution in 1931. He became Chief of the Gynecological Service, a position which he has long held with distinction. The residency training program has been one of Doctor Nelson's chief

A dinner honoring Harry Monroe Nelson, M.D., President of the American Cancer Society, will be held at the Sheraton-Cadillac Hotel, Detroit, Thursday, March 12, 1953, at 6:30 p.m.

interests as attested to by the influence he has exerted on its standards of proficiency in gynecologic diagnosis, treatment and surgery. The excellence of this training program has been responsible, in no small part, for establishing the affiliation of this residency with Wayne University College of Medicine. Doctor Nelson is Associate Professor of Gynecology at Wayne.

The "Cancer Problem" early had been one of Doctor Nelson's chief concerns in Gynecology. He organized the Cancer Committee of Woman's Hospital in the early days of his association and has directed its activities since. In 1937 the Southeastern Michigan Division of the American Society for Control of Cancer was organized. Doctor Nelson has served this Division throughout its independent history. In 1938 the first executive committee was appointed, the committee consisting of Dr. H. M. Nelson, Dr. M. A. Darling, Dr. C. D. Brooks, Dr. T. A. Gruber and Dr. F. M. Meader. Doctor Nelson was made chairman of the committee. In 1945, the American Society for Control of Cancer was reorganized into the American Cancer Society, Inc. Doctor Nelson continued on as president of the local executive committee. Realizing that the ideal of the late Dr. Rollin Stevens—a Cancer Institute in Detroit —was of great importance in furthering cancer work in this area, Doctor Nelson and other members of the Executive Committee of the American Cancer Society, Southeastern Michigan Division, placed their fund-raising potential behind the "ideal" of Doctor Stevens, and through their efforts and the efforts of the Woman's Field Army, the Detroit Cancer Center was developed, with its growth into several coordinated agencies: The Woman's Activities of the ACS; The Yates Memorial Clinic; The Michigan Tumor Registry and The Detroit Institute of Cancer Research. The splendid building at 4811 John R. Street stands as a tribute to the advanced thinking of this committee. The affiliation of the Yates Memorial Clinic and the Detroit Institute of Cancer Research with Wayne University are further testimonials of the wisdom exhibited by the local executive committee of the American Cancer Society, and the Board of Trustees of the Detroit Institute of Cancer Research. After Doctor Stevens' death in 1946, Doctor Nelson succeeded to the presidency of the Detroit Institute of Cancer Resarch and has continued to serve as a member of its Board of Trustees.

Doctor Nelson has been a member of the Board of Trustees of the American Cancer Society (national) since its reorganization in 1945, and chairman of its Medical and Scientific Committee the past two years. In 1952, in keeping with his faithful and excellent service to the organization, he was elected president. These activities have required much sacrifice of time and energy, entailing frequent trips to New York and other medical centers. One of his outstanding accomplishments nationally was the breaking of the barrier which resisted the affiliation of a national fund-raising organization to federated fund raising such as we have in Detroit in the United Foundation. The American Cancer Society was the first national organization to accept the principle of federated fund raising, in place of individual isolated campaigns.

Doctor Nelson's medical society affiliations include membership or fellowship in the American Medical Association, American College of Surgeons, American Board of Obstetrics and Gynecology, Central States Gynecological and Obstetrical Society, American Academy of Obstetrics and Gynecology, Michigan State Medical Society, Wayne County Medical Society and the Michigan Society of Obstetricians and Gynecologists. He served the latter society as president in 1939.

These attainments in the field of medical science and practice could hardly have been successful without time for diversion with its physical and mental relaxation. Here we return to Harry, who has found these relaxations in his farm and farm home at 20811 Ten Mile Road. While in the field of medicine his success has become national, his perfection in development of pure-bred saddle horses and Hereford cattle has become well known to his farmer neighbors.

It is difficult to conclude a sketch of this type because it must end prematurely—only time will end such a career. We know that Harry will carry on, we hope for many years, continuing to give personal sacrifice for others in the true tradition of Doctors of Medicine.

Doctor Nelson, we all salute you on this occasion!

The possibility of cancer should occupy a prominent place in every physician's thinking in every examination he makes.

* * *

The co-operation of the parent, physician, surgeon, pathologist, radiologist, and health officer is necessary in each case of childhood malignancy if unnecessary deaths from this group of diseases are to be prevented.

Michigan State Medical Society

Supplemental Roster, 1952

Names of members for whom 1952 dues have been received from the County Medical Society Secretary from August 31, 1952, to December 10, 1952.

(Special Memberships are indicated as follows: "E" for Emeritus Members; "L" for Life Members; "R" for Retired Members; "A" for Associate Members; "M" for Military Members; all others are Active Members)

ALLEGAN COUNTY

Corkill, Clifford C.....Douglas

ALPENA COUNTY

Brown, Donald C.....312 E. Chisholm St., Alpena

BERRIEN COUNTY

Eidson, Hazel D.....Berrien Springs
Irgens, Edwin R.....11 Peoples State Bank, St. Joseph
Litvin, Lewis E.....Berrien Center
Ruth J. Griswold.....190 Washington, Benton Harbor
Skinner, James.....922 Main Street, St. Joseph
Swingle, Alvin J.....84 W. Main, Benton Harbor
Urist, Maurice D.....454 Pipestone, Benton Harbor

BRANCH COUNTY

Culver, Bert W.....78 Division St., Coldwater, Michigan

CALHOUN COUNTY

Brown, Clarence R.(M).....
Percy Jones Hospital, Battle Creek

DICKINSON-IRON COUNTIES

McEachran, Hugh D.....401 East C St., Iron Mountain

EATON COUNTY

Engle, Paul H.....121 S. Main St., Olivet

GENESEE COUNTY

Biggar, Henry R.....3109 S. Saginaw, Flint
Burnside, Howard B.....300 Whitmore Rd., Detroit
Clark, Clifford P.....
515 Villa Bella Ave., Coral Gables, Fla.
David, T. George.....5502 N. Saginaw, Flint
Hufton, Wilfrid L.....721 W. Sixth Ave., Flint
Miller, Bryce A.....111 N. Beech St., Flushing
Morrish, Ray S.....1715 Crescent Dr., Flint
Sandberg, Russell G...1315 Mott Foundation Bldg., Flint
Varney, Howard L.....1415 Broadway, Flint

GOGEBIC COUNTY

Anderson, Charles E.....Anvil Location, Bessemer

GRAND TRAVERSE-LEELANAU-BENZIE COUNTIES

Merritt, Harry E.....112½ E. Front St., Traverse City
Trautman, Frederick D.....Frankfort
Wilcox, Paul H.....526 W. 10th St., Traverse City

HILLSDALE COUNTY

Kline, Fred.....Litchfield

HOUGHTON-BARAGA-KEWEENAW COUNTIES

King, Sidney.....St. Joseph Hospital, Hancock

INGHAM COUNTY

Foust, Earl H.....816 E. Key Ave., Eustis, Fla.

IONIA-MONTCALM COUNTIES

Campbell, R. E.....106 N. Depot Street, Ionia

JACKSON COUNTY

Hackett, Thomas E.....401 Carter Bldg., Jackson

KENT COUNTY

Barofsky, G. F.....736 Burton St., S.E., Grand Rapids
Booher, Craig E...Blodgett Medical Bldg., Grand Rapids
DeWar, Murray M.....
623 Medical Arts Bldg., Grand Rapids
Houghton, Richard C.....
525 Glenwood, S.E., Grand Rapids
Kinkella, Albert M.....
Kendall Professional Bldg., Grand Rapids
Pool, John D.....445 Cherry St., S.E., Grand Rapids
Stoneman, Fernley.....11 South Wilson, Grandville
Thomson, John W.....
1516 Wealthy St., S.E., Grand Rapids

LAPEER COUNTY

Bishop, Gilbert C.....Almont
Boruch, Leon R.....Drawer A., Lapeer
Lass, Edward H.....Lapeer
O'Brien, Daniel J.....Nepessing St., Lapeer
Rehn, Adolph T.....Lapeer State Home, Lapeer
Smith, G. L.....Imlay City

LENAWEE COUNTY

Hewes, Ara B.....146 E. Maumee St., Adrian
Hewes, William H.....146 E. Maumee St., Adrian
Hornsby, Wm. B.....132 E. Chicago, Clinton

MACOMB COUNTY

Parker, B. Morgan.....Utica
Sturm, Frederick A.....29405 Jefferson St. Clair Shores

MARQUETTE-ALGER COUNTIES

Drury, Chas. P.....Marquette Health Office, Marquette
Fennig, Foster A.....315 N. Front St., Marquette
Serbst, Charles A.....Bacon Bldg., Marquette

MIDLAND COUNTY

Gay, Harold H.....Dow Chemical Company, Midland
Kaasa, Laurin J.....Midland

MONROE COUNTY

Mahoney, Thomas W.....318 E. First St., Monroe
Tomlinson, Ledyard H.....Newport

NORTHERN MICHIGAN MEDICAL SOCIETY

Larson, Walter E.....214 N. Main St., Cheboygan
Lawrie, Guy K.....Petoskey
Palmer, Russell E.....Charlevoix
Stringham, James R.....225 Backus St., Cheboygan

OAKLAND COUNTY

Barker, Charles P.....Pontiac State Hosp., Pontiac
Blackwell, Leonard.....549½ N. Perry, Pontiac
Carrie, Robert G.....23760 Woodward, Pleasant Ridge
Carrow, Joyce M.....622 Riker Bldg., Pontiac
Christie, Edward A.....412 Riker Bldg., Pontiac
Edwards, J. W.....8400 W. Eight Mile Rd., Ferndale
Geist, Edgar J.....Hills Theater Bldg., Rochester
Gibson, Richard E.....1011 Hazel Street, Birmingham
Hull, Robert P.....23625 Woodward, Ferndale
Keeffe, Eugene J.....St. Joseph's Hospital, Pontiac
Larson, Alvin R.....640 Riker Bldg., Pontiac
Meisner, Harry E.....10851 W. Ten Mile Rd., Oak Park
Milgrom, Sidney.....1229 W. Washington, Royal Oak

Neafie, Chas. A.....493 Orchard Lake Ave., Pontiac
Ports, Preston W.....33109 Grand River, Farmington
Prevett, William.....212 National Bldg., Pontiac
Sheridan, F. Michael.....
1307 S. Washington, Huntington Woods
Sibley, Harry.....15 Mathews St., Pontiac
White, Robert H.....47 Bloomfield Terrace, Pontiac
Zujko, Alphonse J.....1402 Pontiac State Bank, Pontiac

SAGINAW COUNTY

MacKinnon, Edwin D.....1616 Court St., Saginaw
Markey, Joseph P.....808 N. Michigan, Saginaw
Prior, Richard W.....Bridgeport
Sample, John T.....606 Rust St., Saginaw
Sullivan, Frances M.....1213 N. Michigan Ave., Saginaw
Weidner, Garland.....City Hall, Saginaw

ST. CLAIR COUNTY

Banting, Kenneth C.....Peoples Bank Bldg., Port Huron
Biggar, R. J.....
Bahrein Petroleum Co., Ltd., Bahrein Island, Persian Gulf
Carney, F. V.....1065 N. Riverside, St. Clair
MacPherson, C. A.....1327 Oakland Ave., St. Clair
Schaefer, W. A.....
Michigan National Bank Bldg., Port Huron

ST. JOSEPH COUNTY

Jacobowitz, John M.....49½ N. Main St., Three Rivers
Lamb, Harry.....101 N. Maple, Sturgis
Springer, Russell A.....Centerville

SHIAWASSEE COUNTY

Bach, Norman F.....113 E. Williams, Owosso
Gurden, Elizabeth L.....113 E. Williams, Owosso
Parker, Walter T.....Matthews Bldg., Owosso
Willoughby, William A.....812 Bradley St., Owosso

TUSCOLA COUNTY

Cook, Raymond R.....Akron
Swanson, E. C.....Vassar

VAN BUREN COUNTY

McFadden, R. I.....Bloomingdale

WASHTENAW COUNTY

Bosch, J. K.....206 W. Dunlap, Northville
Gordon, Clayton H. (A).....
University Hospital, Ann Arbor
Hinerman, Dorin L.....
Dept. of Pathology, University Hospital, Ann Arbor
Hodges, Fred J. III (A).....
University Hospital, Ann Arbor
Ivanoff, John C.....St. Joseph's Hospital, Ann Arbor
Kambly, Arnold H.....
411 First National Bldg., Ann Arbor
Kempf, Paul R., Jr. (A).....
University Hospital, Ann Arbor
Maher, James A. (A).....419 N. Ingalls, Ann Arbor
Reynolds, Robert M. (A).....
c/o Mr. George Stierer, 219 Taney, Gary, Ind.
Scott, Edward B. (A).....
1786 E. 12th St., Salt Lake City, Utah
Scott, Kathryn, N. G. (A).....
1786 E. 12th St., Salt Lake City, Utah
Wicht, Paul J.....1385 W. Michigan, Ypsilanti
Wilson, James LeRoy.....
University Hospital, Ann Arbor, Mich.

HONORARY MEMBERS

D. Hale Brake, State Treasurer....Capitol Bldg., Lansing
Paul de Kruif, Ph.D.....Wake Robin, Holland
Charles E. Kahlke, M.D.....Benton Harbor
Leroy A. Porter.....Mich. Dept. of Health, Lansing

WAYNE COUNTY

Agnone, Eugene J.....1420 St. Antoine St., Detroit 6
Alford, Barry H.....690 S. Main St., Plymouth
Annessa, Domenico M.....3536 Burns, Detroit
Axelrod, Mildred A.....13725 Eight Mi. Road, Detroit 35
Axelrod, Robert G.....18518 Appoline, Detroit 35

Baima, Margaret.....1326 St. Antoine, Detroit 26
Barnett, Saul E.....744 Lathrop, Detroit
Barrett, Raymond J.....2258 Webb, Detroit 6
Bash, Nicholas P.....Veterans Adm. Hospital, Dearborn
Becker, Jos. W.....407 Kales Bldg., Detroit 26
Berlin, Allen.....722 Maccabees Bldg., Detroit 2
Brooks, Eugene M.....2400 Ewald Circle, Detroit 4
Bruder, Robert C.....9191 Prevost, Detroit 28

Cameron, A. H.....2853 Biddle, Wyandotte
Capuzzi, Eugene T.....501 W. Dunlap, Northville
Chalk, Carl C.....418 Hillcrest, Grosse Pte. Farms
Cherup, Nicholas.....11838 Jos. Campau, Hamtramck
Clark, Arthur M.....22400 Cherryhill, Dearborn

Clarke, Charles N.....2501 W. Grand Blvd., Detroit
Donelson, Kater.....27371 Michigan Ave., Inkster
Dranginis, Edward J.....850 N. Rademacher, Detroit 9
Dutcher, Dwight J.....14235 Crescent Dr., Detroit 23

Figiel, Steven J.....Grace Hospital, Detroit 1
Finkell, Lawrence J.....18916 Woodward Ave., Detroit 3

Gariepy, Louis B.....16401 Grand River, Detroit 27
Goldfaden, Alfred.....6157 Army, Detroit 9
Goodman, Maxwell M...9246 Grand River Ave., Detroit 4
Goss, Samuel B.....10 Peterboro, Detroit
Graham, Julius A.....4102 Brush St., Detroit
Griffin, Robert J.....20227 Lancaster, Detroit 24

Harmon, Walter.....2510 E. Davison, Detroit
Harris, Arthur D.....8943 Twelfth St., Detroit
Hendry, Hugh W.....2716 Rochester, Detroit
Henig, Fred N.....7605 W. Seven Mile Rd., Detroit 21
Hobbs, Donald V.....18530 Grand River, Detroit 23
Hodoski, Frank J.....3814 35th St., Detroit
Hurd, Brooks H.....20187 Schaefer Road, Detroit

Johnson, John F.....1512 St. Antoine, Detroit 26

Kenfield, Wm. J.....3350 Campbell St., Dearborn
Kirtland, William B.....2201 E. Jefferson, Detroit 7
Krabbenhoft, Kenneth.....Harper Hospital, Detroit 1

Leight, Leonard.....3440 Ewald Circle, Detroit 4
Lerman, Samuel I.....4400 Livernois, Detroit
Lipnik, Morris J.....15101 W. Seven Mi Rd., Detroit 35

Malcolmson, Joseph E.....16861 Wyoming, Detroit 21
Mandiberg, Jack N...12700 W. Seven Mi. Rd., Detroit 21
Martineau, Perry C.....1151 Taylor Ave., Detroit 2
McDonald, Wm. G.....7301 Schaefer Highway, Dearborn
Metzger, Harry C.....2294 Atkinson Ave., Detroit 6
Milton, Samuel B...600 Palmerston Ave., River Rouge 18
Missavage, Edward, Jr.....
Wayne Co. General Hospital, Eloise

Nehra, John N.....18514 Mack Ave., Detroit 36
Noer, Rudolf J.....1512 St. Antoine, Detroit 26
Noshay, Wm. C.....Henry Ford Hospital, Detroit 2

Palmisano, I. J.....25447 Plymouth Rd., Detroit 28
Prisbe, Edward J.....16604 Plymouth Rd., Detroit 27
Priver, Julien.....6741 West Outer Dr., Detroit 35

Raskin, Herbert A.....19466 Greenfield, Detroit
Reder, Benjamin.....20731 Evergreen, Detroit 19
Reive, David L.....24401 Plymouth, Detroit 28

Sa'di, Lutfi M.....525 Professional Bldg., Detroit 1
Schneider, Charles L.....1512 St. Antoine, Detroit 26
Seelye, Juliette.....1050 Fisher Bldg., Detroit 2
Seski, Arthur G.....863 Fisher Bldg., Detroit 2
Sewell, Guy W.....16321 Mack Ave., Detroit 24
Shellhamer, Claire S.....438 Maccabees Bldg., Detroit
Sherman, William L., Jr.....201 E. Kirby, Detroit 2
Smyka, Stanley.....6111 Charles, Detroit 12

(Continued on Page 110)



Normal peristaltic action results from activity of the muscle layers as they are gently distended by bulk within the intestine; mucosal irritants cause overactivity of the muscle layers resulting in hyperperistalsis or spasm.

Corrective Action of Metamucil® in Abnormal Physiology of Constipation

Abnormally prolonged colonic retention, whether in a spastic or an atonic colon, demands the greatest care to assure correction.

The mucosa does not require stimulating; hence, stimulating cathartics, "roughage" and other physical and chemical irritating measures, are today often considered irrational.

On the other hand, the muscularis does require a stimulus to initiate peristalsis. This physiologic stimulus is the mechanism by which bland distention of the colon establishes a reflex, with the muscularis at the terminus of the reflex arc.

Metamucil literally reeducates the sluggish and also the spastic colon. Taken with adequate amounts of water, Metamucil forms a smooth, hydrophilic colloid. As this colloidal mass passes through the large intestine, it exerts a gentle, distending pressure within the lumen, thus initiating the peristaltic reflex necessary for evacuation.

A program of Metamucil therapy helps to restore proper tone to the intestinal musculature, thereby establishing proper bowel habits.

Metamucil® is the highly refined mucilloid of Plantago ovata (50%), a seed of the psyllium group, combined with dextrose (50%) as a dispersing agent. It is accepted by the Council on Pharmacy and Chemistry of the American Medical Association.

G. D. Searle & Co.

Research in the Service of Medicine

Michigan's Department of Health

Albert E. Heustis, M.D., Commissioner

SALMONELLA MONTEVIDEO SURVIVE IN POWDERED EGG YOLKS

Another reminder of the amazing survival capacity of the Salmonella organisms came with notification to the Department from the Public Health Service that shipments of powdered egg yolk for use in supplementary feeding of infants had been found to be infected with Salmonella Montevideo and had been seized under the Pure Food and Drug Act. Infants are highly susceptible to this organism. The manufacturer immediately traced and withdrew all shipments.

In the process of preparation, the powdered egg yolks had been pasturized but heat does not affect the Salmonella organisms in the dry state. In fact, the process was exactly suited to their preservation.

Several years ago, outbreaks attributed to this organism occurred in two Michigan institutions, one county and one state, alerting hospital administrators to a realization that powdered eggs should be used only in preparation of foods that are cooked. In both instances, the powdered eggs had been used in making eggnogs for debilitated patients.

NEW BIRTH CERTIFICATES SOON TO BE ADOPTED

A new five-part birth certificate will be put in use by the Department, probably some time in January. It has been tried out very successfully in a Lansing hospital.

One copy of the new certificate will be for the hospital, one for the local registrar, one for the county clerk, one for the parents and the original for the Michigan Department of Health. A work-sheet replica of the certificate will also be furnished to hospitals in padded form, for convenience in collecting data at the bedside. This will go in the patient's file.

The carbon copies of the certificate for the county clerk, the local registrar and the parents will be in abbreviated form, omitting confidential data for medical and statistical use.

NUTRITION APPRENTICESHIP PROGRAM PROGRESSES

The apprenticeship program in public health nutrition established in the Department in October after much preparation has reached the point where the two trainees have completed their orientation and have been assigned to work in local health departments. They will spend the remainder of their year's training period in the field, working as members of the staff of the local departments, with technical supervision from Department nutritionists.

This on-the-job training program was set up to help meet the increasing demand for nutrition service throughout the state. It was planned by the Nutrition Recruitment and Training Committee of the Department which has representation from local health departments, vocational education, home economics education, public health education and voluntary health agencies. The American Dairy Association of Michigan contributed 50 per cent of the cost for the first year's program. Two apprenticeships were established. Upon completion of the year's training, the trainees will be available for positions in local health departments in Michigan.

TWO NEW TRI-COUNTY HEALTH DEPARTMENTS ORGANIZED

Two new tri-county health departments began functioning January first, the Isabella-Mecosta-Osceola health department in central Michigan and the Iron-Ontonagon-Dickinson health department in the Upper Peninsula. Main office of the former wil be in Mt. Pleasant with branches in Big Rapids and Reed City. The main office of the Iron-Ontonagon-Dickinson department will be in Stambaugh with branch offices in Ontonagon and Iron Mountain.

JANUARY DAYS—NOT JULY—ARE DOG DAYS

The recent experience of a southern Michigan county emphasizes the widespread damage that one rabid dog can do, and highlights the need for urging vaccination of dogs now for the protection both of the dogs and of human beings with whom they come in contact. In Michigan, late winter and early spring is the peak season for rabies among animals, and dogs are the chief offenders.

A Pekingese on a farm in the county in question developed rabies and as a result sixteen persons are under treatment, the dog itself died as did another dog on the same farm, a neighbor's dog and a ram on that farm died and a cow, a calf and a lamb belonging to neighbors died. All were diagnosed by the laboratory as rabid. Seven other dogs were isolated for observation and ten cats were killed.

Since January 1, 1952, cases of rabies in animals reported to the Michigan Department of Health have totaled 179. This is about the usual number. There have been no reports of rabies in humans in that time. Only one death from rabies has occurred since 1948, but an average of 1,000 Michigan persons are given anti-rabies injections each year.

Michigan's dog licensing law has a provision giving county boards of supervisors the power to adopt a regulation requiring that all dogs in the county be vaccinated before they can be licensed. Some counties have taken advantage of this provision and require vaccination as a prerequisite to licensing. Many others have not. In the absence of any statewide uniformity, the Department is emphasizing dog vaccination in news releases and by radio. Vaccination protects for about a year.

In Memoriam

HENRI BELANGER, M.D., of River Rouge, died November 1, 1952, at the age of eighty.

Doctor Belanger was a widely known doctor of medicine in the Down River area and had practiced in that locality for the past fifty-eight years. He was graduated from the Detroit College of Medicine in 1894.

Doctor Belanger was an Emeritus Member of both the Wayne County Medical Society and the Michigan State Medical Society.

He was on the staff of the Delray General Hospital from 1896 to the time of his death and also served as a surgeon for the Michigan Central Railroad from 1905 to 1935. In addition to these activities, he was health officer of River Rouge from 1899 to 1921 and again from 1945 until his death. He was instrumental in the incorporation of River Rouge as a village and later as a city. His activities in public affairs also included membership on the River Rouge Board of Education, a position he had held since 1921.

Besides his wife, Rose, he is survived by a son and three daughters. They are Ernest Belanger, M.D., Mrs. Clara Montie, Mrs. Anne Botz and Mrs. Rosalie Andervak.

WALTER G. COLVIN, M.D., of Grand Rapids, died November 3, 1952, at the age of fifty-two.

For the past twenty-five years he had served the community of Grand Rapids first as a radiologist and later as a surgeon. Before coming to Grand Rapids, he studied at the University of Michigan Medical School, and then he joined the staff of Butterworth Hospital in Grand Rapids as a radiologist. He was graduated from the University of Western Ontario Medical School in 1921. Later, he studied surgery at Johns Hopkins University. During World War II he served as a major in the Medical Corps.

At the time of his death, Dr. Colvin was Vice Chief of Staff of Butterworth Hospital.

He is survived by his wife, Eva; three children, William, Patricia, and John; two brothers, Gerald, of Kingston, Ontario, and John of London, Ontario.

MARION F. PARRISH, M.D., of Sturgis, died October 31, 1952, at the age of seventy-nine. For the past thirty years he had served the community of Sturgis as a surgeon. Before that Dr. Parrish had practiced in Indiana following his graduation from the University of Cincinnati College of Medicine in 1897.

Dr. Parrish had been Chief of Staff of Sturgis Memorial Hospital and was a member of the St. Joseph County Medical Society. He also was a member of the Michigan State Medical Society's "Fifty Year Club." He served in the medical corps during World War I.

Dr. Parrish is survived by his wife, Minnie, and a daughter, Mrs. Earnest Henricks, of Sturgis.

STEELTONE

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FRANK A. PRATT, M.D., of Kalamazoo, died September 29, 1952, at the age of eighty. For the past forty years he had served the community of Kalamazoo. Previous to that, Dr. Pratt had practiced in Centreville following his graduation from the Detroit College of Medicine in 1906.

Dr. Pratt was a member of the staffs of Bronson and Borgess Hospitals. He is credited with delivering the first baby to be born at Borgess Hospital after the institution opened in 1917.

He was a member of the Kalamazoo Academy of Medicine and a Life Member of the Michigan State Medical Society.

Dr. Pratt is survived by two daughters, Mrs. Gordon Dilno and Mrs. Margaret Boersma, of Kalamazoo. He also leaves three grandchildren.

ISAAC L. SPALDING, M.D., of Hudson, died September 1, 1952, at the age of seventy-seven.

Doctor Spalding was graduated from the Detroit College of Medicine in 1897. He was a member of the Lenawee County Medical Society and an Emeritus Member of the Michigan State Medical Society.

RAY C. WHITMORE, M.D., of Hancock, died October 28, 1952, at the age of sixty-nine.

He had served the community of Hancock as an otolaryngologist and ophthalmologist. Dr. Whitmore was graduated from the University of Michigan Medical School in 1906.

He was a Retired Member of the Houghton-Baraga-Keweenaw County Medical Society and of the Michigan State Medical Society.

Besides his wife, Ethel, he is survived by a daughter, Mrs. Mary Steveling, of Rochester, New York; a son, Ralph, of California, and a sister, Austa Cox, of Quincy.

EARLE A. IRVIN, M.D.

(Continued from Page 82)

venience. It is possible to suspect that his work prior to becoming a physician provided this guidance. That goes back to Bismarck, North Dakota, where he served in the repair department of the International Harvester Company. That experience, combined with his subsequent acquisitions in the science and art of medicine reflects itself at the Cadillac plant in his understanding of the requirement of rehabilitation, his good placement methods, his medical record system, his grasp of psychosomatic medicine, his warmth in human relations, his case-finding programs, his concepts of prevention, his medical department.

If the growth and development of a human being could be plotted out on graph paper, this graph in the case of Bud is so near vertical as to require pole spurs to ascend. "Beware of the ambitious man. He is dangerous." Bud is clearly ambitious but no one shouts "Beware." His ambitions run not to himself but to industrial medicine. He has a burning fire to see that in the country over, industrial medicine attains its rightful place as a science laudable in the safeguarding of all industrial workers, in fitting properly into the amazing expansion of the nation's undeniable industrial culture.

Impatient Apostle of Best in Industrial Medicine

Bud is a power now—a voice that has helped to dispel the wilderness of shabby industrial medicine —a hand that has dipped personally into the development of industrial medicine—an eye that discerns the future requisites of industrial medicine for oncoming generations of industrial physicians.

Industrial medicine was a late starter in this country. With some few exceptions the first generation of industrial physicians started its ministrations about 1910. That first generation is disappearing. Those who survive have become the nestors, the elder statesmen, the historians, the repositories of experience. Bud belongs not to that generation. He is the second generation. For that generation he is a spokesman; but among all industrial physicians, young and old, he is a leader.

The stripling of the 1920's working away in the repair shops of the International Harvester Company in North Dakota, wondering perhaps what life might hold for him is now the distinguished president of the Industrial Medical Association, an international organization of industrial physicians, all of good will, of working hands, of planful heads.

Congratulations, Mr. President! Congratulations, Bud!

I place economy among the first and most important virtues and public debt as the greatest of dangers. To preserve our independence we must not let our rulers load us with perpetual debt. We must make our choice between economy and liberty, or profusion and servitude. If we can prevent the government from wasting the labors of the people under the pretense of caring for them, they will be happy. The same prudence which in private life would forbid our paying our money for unexplained projects forbids it in the disposition of public money.—THOMAS JEFFERSON.

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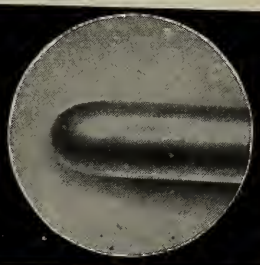
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THE G. A. INGRAM COMPANY
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Correspondence

The Council of the Michigan State Medical Society
Lansing 15, Michigan

Gentlemen:

We have had a substantial number of comments from doctors locally and throughout the state regarding the United Fund story in the October issue of THE JOURNAL.

We would like those responsible for the inclusion of this to know our appreciation.

So far as we know, this is the first article to appear in any professional journal in Michigan and we commend you for your pioneering efforts in this area.

We also deeply appreciate the editorial "Red Feather and Torch." We have had many favorable editorials in various newspapers and magazines during the past few years but certainly none have given better or more objective treatment.

You will be interested to know that the figures to date indicate that the pledges for the 1952-53 United campaigns throughout Michigan are about two million dollars greater than those made in any previous year. Some of this increase, of course, is due to favorable economic conditions but a very substantial portion must be credited to more enlightened giving. It is editorial and other comment such as yours which is contributing to this end.

Please express our thanks to all interested.

Sincerely yours,
F. A. McCARTNEY
Executive Vice President
United Health and Welfare Fund of Michigan, Inc.

Lansing, Michigan
December 16, 1952

* * *

Dear Doctor Haughey:

This letter is being written at the suggestion of our Medical Advisory Committee for possible publication in the Medical Journal, for the information of physicians who may have wondered about the necessity or advisability of securing a signed release from the patient before medical information is released to welfare agencies, a question that is occasionally asked this Department.

The question as it pertains to assistance administered through the county bureaus of social aid, which includes old age assistance, aid to dependent children, aid to the blind and aid to the disabled, was considered at a recent meeting of our Medical Advisory Committee.

The Committee noted that the application for any of the above types of assistance includes the following paragraph:

> "I agree to give complete and accurate information to representatives of the county bureau of social aid, and I empower the bureau to obtain such information from other sources as may be necessary to establish my eligibility for assistance."

It was the opinion of the Committee that this statement adequately protects the doctor who gives medical information in response to a request from the county bureau of social aid.

With regard to requests from the county department of social welfare, which as you know administers general relief and infirmary and hospital care for afflicted

Say you saw it in the Journal of the Michigan State Medical Society

adults, each county department defines its own policies and develops its own forms. Some of them we know include an authorization similar to that used by the bureaus of social aid, but we do not know that all of them do.

We believe that this information will be of interest to the members of the Medical Society and will appreciate your courtesy in bringing it to their attention.

Very truly yours,
W. J. MAXEY
Director, State of Michigan, Department of Social Welfare

Lansing, Michigan
November 25, 1952

* * *

Dear Dr. Haughey:

Over this weekend I had an opportunity to make a try at catching up with my home reading and read your editorial on the Commission in the October issue. I thought you did a very good job with this editorial and am sure the Commission members will be pleased. Copies of the editorial will be made available to them.

If we can ever be of assistance to you by supplying you with information, I hope you will call on us.

Sincerely yours,
HARRY BECKER
Associate Director, Commission of Financing of Hospital Care

Chicago, Illinois
December 1, 1952

* * *

Doctor Haughey:

I have just received a copy of the review in your September JOURNAL on my book, "Man To Man." This is a splendid appraisal by one who shows a rare capacity for analyzing the trend of our national monetary practice and the impacts which flow from them. I want you to know that I am deeply appreciative of your efforts in behalf of our country.

We do know that the professions have the highest stake in the maintenance of constitutional government, being the greatest immediate sufferers in a communistic society.

BERNARD N. WARD, C.P.A.

* * *

The Council
Michigan State Medical Society
Lansing, Michigan

Gentlemen:

It is my pleasure and privilege to express to you the grateful appreciation of the Bay County Medical Society for your valuable assistance in our recent hospital campaign.

We are appreciative of the co-operation received from our various groups, especially the Woman's Auxiliary and the Medical Assistants. It is very apparent however that the campaign could not have succeeded without the expert planning, timing and execution of the plan of action developed by Mr. Hugh Brenneman and his highly efficient staff of Messrs. Kantner, Campbell and Ford.

The volume of work and its details, which will be evidenced by the statistical summary being prepared, will be unbelievable. Many of our friends, even as late as election morning, predicted our defeat because of the general adverse public relations of the Medical profession over the years.

Any doubt in the mind of physicians as to our need for a department of Public Relations in medical organizations should be dispelled by the herculean task performed by Mr. Brenneman and his staff. We in Michigan should be proud of what we know is the most efficient Public Relations Department in any State Medical Society.

The whole campaign was conducted with extreme dignity. The utilization of media and the timing of releases and events was perfect. The general effect of the type of

The Treatment of
ALCOHOLISM..
A MEDICAL
PROBLEM



In addition to private conferences as needed, group re-education is indispensable in leading the patient back toward total abstinence.

The concept of alcoholism as a medical problem, now generally accepted, is basic in the successful control of the "problem drinker."

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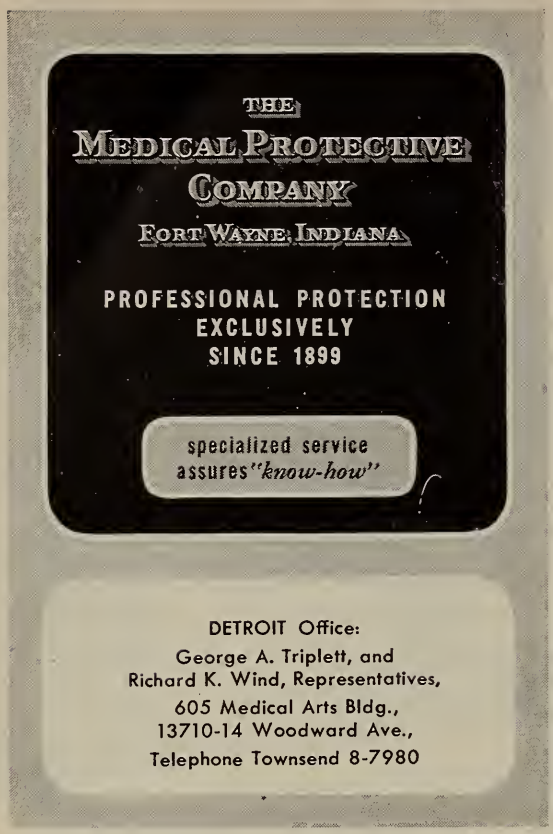
The referring physician is kept informed of the patient's progress and receives a summary of the case upon the patient's dismissal.

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The pathologist in direction is recognized by the Council on Medical Education and Hospitals of the A. M. A.

campaign and its manner of conduction has reflected favorably for the Medical profession upon the public.

While the campaign was costly and strenuous you can justifiably feel proud of the contribution you have made to the maintenance of high Medical Standards and the control of substandard practitioners.

We are indeed grateful for your help and cannot speak too highly of the efficient and dignified services of Mr. Brenneman and his staff in a most trying situation.

Very truly yours,
Bay County Medical Society
A. L. Ziliak, M.D., *President*

Bay City, Michigan.
November 8, 1952

* * *

L. Fernald Foster, M.D., Secretary
Michigan State Medical Society
Lansing 15, Michigan

Dear Doctor Foster,

I am just in receipt of your kind letter of November 7 informing me of my election to Life Membership in our State Society. I am deeply appreciative of this consideration on the part of the house of delegates and trust that you will convey to them my very sincere thanks for conferring this honor upon me.

With very cordial greetings.

Sincerely,
U. J. Wile, M.D.

Ann Arbor, Michigan
November 10, 1952

* * *

F. L. Rector, M.D.
Michigan State Medical Society,
606 Townsend St.,
Lansing 15, Mich.

Dear Dr. Rector,

I thought your book on cancer for high schools was a tremendous job of presenting the information in a way that hit the target exactly the way you wanted it to, and I'm finding out that a lot of others regard it the same way.

The American Cancer Sociey here (via Tuescher) has promised to let us know sometime about how the book is put to use in the schools in the Detroit area, and we'd be interested in the same information about out-state schools.

Of course, it probably will take the schools some time to figure out just what they can do, and to integrate the material into school courses, but it seems inconceivable to me that it should not be done on a wide scale.

Congratulations on a wonderful job!

Sincerely yours,
Jack Pickering
Detroit Times

Detroit, Michigan
December 6, 1952

* * *

William Bromme, M.D., Council Chairman
Michigan State Medical Society
Lansing, Michigan

Dear Dr. Bromme:

I think it is one of the grandest things that could happen to me, to be presented with the scroll signifying honorary membership in the Michigan State Medical Society.

I want to thank you from the bottom of my heart for the kindness extended me. A copy of The Journal has reached me and I'm asking Bill Burns to send me a half dozen extra copies. I'm pretty proud (have reasons to be)!

Sincerely.
LeRoy A. Potter

Lansing, Michigan
December 8, 1952

Say you saw it in the Journal of the Michigan State Medical Society



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Anesthetic in Hospital	10.00	20.00	30.00	40.00
X-Ray in Hospital	10.00	20.00	30.00	40.00
Medicines in Hospital	10.00	20.00	30.00	40.00
Ambulance to or from Hospital	10.00	20.00	30.00	40.00
COSTS (Quarterly)				
Adult	2.50	5.00	7.50	10.00
Child to age 19	1.50	3.00	4.50	6.00
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. . . . . NEWS MEDICAL

MICHIGAN AUTHORS

Martin J. Urist, M.D., South Haven, is the author of an article, "Simulated Divergence Paralysis." published in the *Archives of Ophthalmology,* November, 1952.

William H. Havener, M.D., and **William U. McReynolds, M.D.,** of Ann Arbor, are the authors of an article, "False Scotomas Associated with High Uncorrected Refractive Errors," published in the *Archives of Ophthalmology,* November, 1952.

Maurice J. Hauser, M.D., and **Harvey Gass, M.D.,** of Detroit, are the authors of an article, "Optic Nerve Pressure by Aneurysm Relieved by Decompression of Optic Nerve," published in the *Archives of Ophthalmology,* November, 1952.

Prescott Jordan, Jr., M.D., F.A.C.S., and **Harper K. Hellems, M.D.,** of Detroit, are the authors of an article, "Mitral Valva Surgery; a Critical Analysis," published in *Surgery Gynecology and Obstetrics,* December, 1952.

Robert C. Bassett, M.D., F.A.C.S., of Ann Arbor, **Carl F. List, M.D., F.A.C.S,** of Grand Rapids, and **Lloyd J. Lemmen, M.D.,** of Ann Arbor, are the authors of an article, "Surgical Treatment of Intracranial Aneurysm," published in *Surgery Gynecology and Obstetrics,* December, 1952.

William W. Coon, M.D., and **Paul E. Hodgson, M.D.,** of Ann Arbor, are the authors of an article, "Fibrinolysis in Surgery Patients-1, Possible Relationship to a Hemorrhagic Diathesis," published in *Surgery Gynecology and Obstetrics,* December, 1952.

Walter M. Whitehouse, M.D., and **John F. Holt, M.D.,** of Ann Arbor, are the authors of an article, "Paradoxical Expiratory Ballooning of the Hypopharynx in Siblings with Bilateral Choanal Atresia," published in *Digest of Ophthalmology and Otolaryngology,* November, 1952.

Henry S. Brown, M.D., of Detroit, is the author of an article, "Treatment of Low-Voltage Burns," published in *Industrial Medicine and Surgery,* December, 1952.

William G. McEvitt, M.D., of Detroit, is the author of an article, "Cleft Lip and Palate and Parental Age," reprinted from *Plastic and Reconstructive Surgery,* August, 1952.

Martin J. Urist, M.D., of South Haven, is the author of an article, "Simulated Paralysis," published in *Archives of Ophthalmology,* November, 1952.

William S. Reveno, M.D., Herbert Rosenbaum, M.D., and **John H. Buell, M.D.,** all of Detroit, are authors of an original article, "Short-Term Use of Corticotropin as Adjunctive Therapy" which appeared in JAMA of August 2.

Peter E. Tuynman, M.D., and **Lawrence Wm. Gardner, M.D.,** Detroit, are authors of an original article, "Bilateral Aplasia of the Lung" which appeared in *Archives of Pathology,* September, 1952.

Samuel J. Levin, M.D., Detroit, is author of an original article "The Optimum Dose of Pollen in the Treatment of Pollinosis of Children" which appeared in the *Journal of Pediatrics,* September, 1952.

* * *

The Michigan Chapter of the American Association of Medical Record Librarians, at its annual convention, held in the Masonic Temple, Detroit, November 15, 1952, heard the following physicians: A. S. Goldstein, M.D., on "Multiple Sclerosis; Medical Aspects"; M. K. Newman, M.D., on "Rehabilitation Aspects of Multiple Sclerosis and Hemiplegia"; W. A. Hudson, M.D., "Chest Diseases." "Relation of Medical Records Librarian to the Administrator" was the subject presented by Owen R. Pinkerman, Hospital Administrator.

* * *

Careers in Nursing.—Six young women entered nursing schools in 1952 for every five in 1951, according to a survey of this state recently completed by the Michigan Committee on Careers in Nursing.

A gain of 21 per cent for all schools of nursing is reported in the current *Michigan Nurse,* official organ of the Michigan State Nurses Association. From 1,383 freshmen admitted the previous year the number this year rose to a postwar peak of 1,674. The increase of 291 was divided between the four university schools offering a B.S. degree in nursing, which accounted for 187 of this number, and the twenty-two hospital schools offering a three-year course, which gained 104.

Practical nursing too, with its one-year course, showed an upward trend. Schools of practical nursing under the Michigan Department of Public Instruction, Office of Vocational Education, admitted 678 new students from July 1, 1951 to July 1, 1952, an increase of nearly 5 per cent over 646 the previous year.

Although national officials estimate that throughout the U. S. about the same number of freshmen entered nursing this year as last, they consider this a good record in view of "the low rate of potential nursing candidates seventeen to eighteen years old" caused by the low birth rate during the depression years.

Michigan's striking increase, the second in two years, is in line with the general upswing in college admissions. A survey made by Dr. Raymond Walters, president of the University of Cincinnati, found that of 480 colleges reporting, 65 per cent had more freshmen than a year ago. Among the reasons given for the state's increase in student nurses are the following:

(Continued on Page 100)

ANNUAL CLINICAL CONFERENCE

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Recent development of new four-year programs leading to a B.S. degree in nursing, at Michigan State College and the University of Michigan; volunteer work by nurses with the co-operation of citizens, medical and hospital auxiliaries, women's clubs, and other community groups to bring nursing before high school girls; and development of Future Nurses Clubs in 160 or more high schools throughout the state.

Tuberculosis becomes more and more a disease of older people.

Follow-up studies* on a community-wide chest x-ray survey in Washington, D. C., reveal a prevalence of tuberculosis six times greater after fifty-four years of age than between fifteen and fifty-four. For non-whites, the ratio was just over six; for whites, just under six.

Projecting these figures on new cases into the unexamined population and arriving at an estimate of the total cases present, known and unknown, the studies find that four of every five cases among the fifteen to fifty-four age group were known, but *among those over fifty-four years of age only two of every five cases were known.*

—MICHIGAN TUBERCULOSIS ASSOCIATION

*American Review of Tuberculosis, Nov. 1952, P. 548 ff.

The American College of Surgeons Annual Symposium on Trauma and Nutrition will be held May 21, 1953, in Ann Arbor. The papers are competitive for the F. A. Coller, M.D., Award. The competition is open to all residents and interns. For complete information, write Clifford H. Keene, M.D., Chairman of Committee on Arrangements, 2120 Wallingford Road, Ann Arbor.

* * *

The Board of Trustees of the American Medical Association has announced its third contribution of a half million dollars to the American Medical Education Foundation, organized in 1950 to help raise funds within the profession for hard-pressed medical schools. This announcement was made at the AMA Clinical Session in Denver, December 2.

* * *

Hill Burton Grants—Recent projects approved for Hill-Burton grants in Michigan are: Hayes-Green-Beach Hospital at Charlotte, total cost of $660,700 including federal contribution of $322,850—to supply 40 additional beds; Grand Haven Municipal Hospital at Grand Haven, Michigan; total cost $397,990 including federal contribution of $52,290—to supply 17 additional beds; St. Clair Hospital, Detroit—total cost $3,461,000 including federal contribution of $800,000—to supply 225 additional beds.

Status of all Hill Burton hospital construction in Michigan, including the above, as of December 1, 1952:

Completed and in Operation: Twenty-two projects at a total cost of $19,187,485, including federal contribu-

(Continued on Page 102)



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A private hospital devoted to community service in the diagnosis and treatment of emotional problems. All accepted psychiatric therapies. An established outpatient department in diagnostic and therapeutic services for referring physicians and agencies.

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(Continued from Page 100)

tion of $6,935,312 and supplying 1351 additional beds.

Under Construction: Eighteen projects at a total cost of $17,770,501, including federal contribution of $6,996,387 and designed to supply 897 additional beds.

Approved, But Not Yet Under Construction: Five projects at a total cost of $5,807,200, including $1,935,-175 federal contribution and designed to supply 386 additional beds.

* * *

C. Robert Dean, M.D., has been appointed director of the Rehabilitation Institute of Metropolitan Detroit, which operates under the Detroit Department of Health with a $250,000 grant from the United Foundation. The Institute is located at Herman Kiefer Hospital, 8811 Hamilton Avenue, Detroit 2. The Technical Advisory Committee is composed of Joseph G. Molner, M.D., Clarence Eismon, M.D., Angus Goetz, M.D., F. A. Weiser, M.D., and Gordon Scott, Ph.D., all of Detroit.

Dr. Dean, a son of Carleton Dean, M.D., Lansing, Director of the Michigan Crippled Children Commission, also has been appointed as instructor in physical medicine at Wayne University College of Medicine.

Dr. Dean, a graduate of Wayne University College of Medicine, recently completed a four-year residency in Minneapolis in physical medicine and rehabilitation.

* * *

The Pan-Pacific Surgical Association will hold its Sixth Pan-Pacific Surgical Conference in Honolulu in November, 1954, according to an announcement by I. S. Ravden, M.D., of Philadelphia, president of the Association. For complete information, write the Association at Suite 7, Young Bldg., Honolulu, Hawaii.

* * *

The First World Congress on Fertility and Sterility will be held at the Henry Hudson Hotel, New York City on May 25-31, 1953. For information, write A. I. Weisman, M.D., 1160 Fifth Avenue, New York.

* * *

Hugh W. Brenneman, MSMS Public Relations Counsel, was a member of a panel on "Building Co-operative Physician-Hospital P.R. Programs" at the 1952 AMA Public Relations Conference, held in Denver on the occasion of the AMA Clinical Session, December 1-5, 1952.

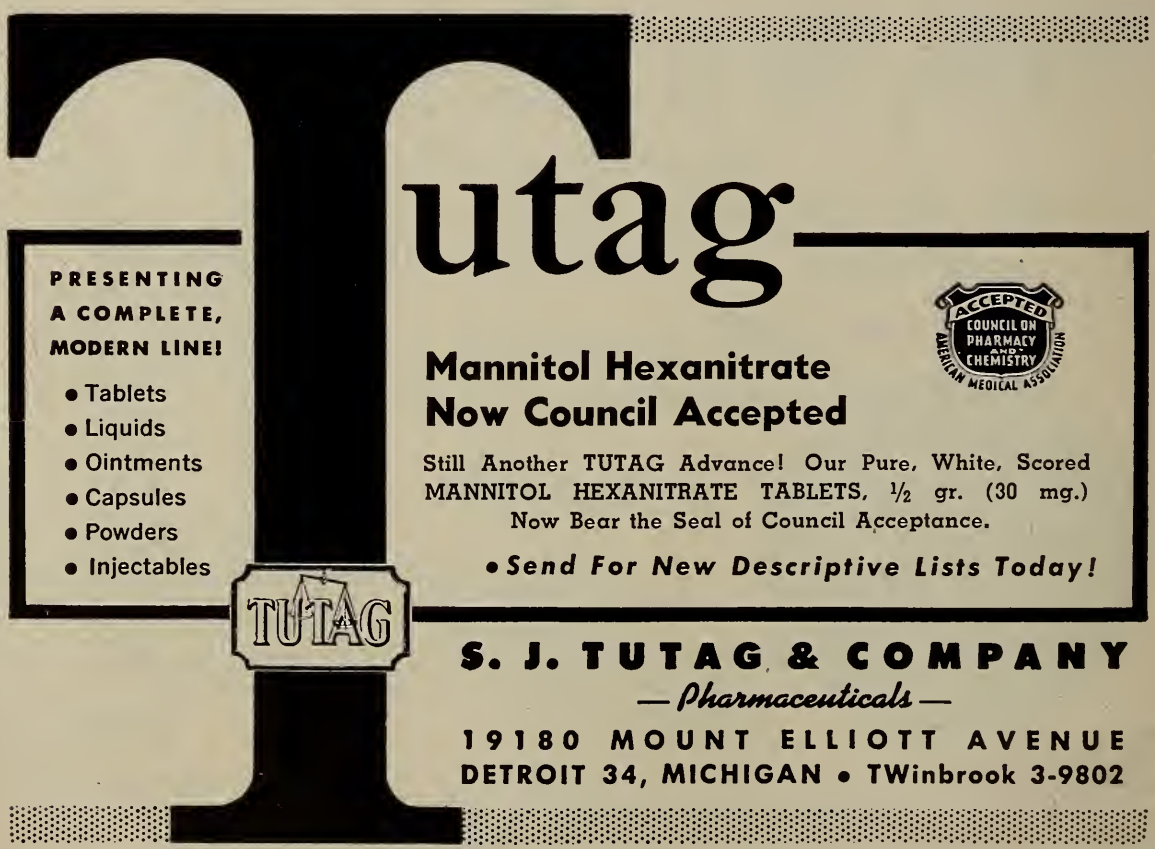
* * *

Robert Ramspeck, former Congressman and now chairman of the U. S. Civil Service Commission, reported at the AMA Public Relations Conference in Denver that the Federal Government had "only" 6,609 information (publicity) specialists on the payroll, not counting typists, clerks, stenographers, secretaries and other auxiliary personnel!

* * *

Rheumatic Fever Postgraduate Fellowships for 1953. —The Rheumatic Fever Control Committee of the Michigan State Medical Society again has written all Rheumatic Fever Center Chairmen re the six annual Postgraduate Fellowships for the study of rheumatic fever

(Continued on Page 104)



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Surgical Technic, Surgical Anatomy and Clinical Surgery, four weeks, starting March 2
Surgical Anatomy and Clinical Surgery, two weeks, starting March 16
Basic Principles in General Surgery, two weeks, starting March 30
Gallbladder Surgery, ten hours, starting April 20
Surgery of Colon and Rectum, one week, starting March 2
General Surgery, one week, starting February 9
General Surgery, two weeks, starting April 20
Fractures and Traumatic Surgery, two weeks, starting March 2
GYNECOLOGY—Intensive Course, two weeks, starting February 16
Vaginal Approach to Pelvic Surgery, one week, starting March 2
OBSTETRICS—Intensive Course, two weeks starting March 2
PEDIATRICS—Intensive Course, two weeks, starting April 6
MEDICINE—Intensive General Course, two weeks, starting May 4
Electrocardiography and Heart Disease, two weeks, starting March 16
Allergy, one month and six months, by appointment
UROLOGY—Intensive Course, two weeks, starting April 13
Ten-Day Practical Course in Cystoscopy starting every two weeks
DERMATOLOGY—Intensive Course, two weeks, starting May 11

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(Continued from Page 102)

to be awarded in 1953. The Committee has approved the comprehensive course in rheumatic fever to be given at St. Francis Sanatorium for cardiac children, Roslyn, Long Island, N. Y., June 1-12, 1953.

Candidates shall have worked in one of the Rheumatic Fever Diagnostic and Consultation Centers of Michigan for a minimum period of one year; they shall signify their intention to continue their work in these Centers upon completion of the P.G. course; and their application is to be approved by the Chairman of the local Rheumatic Fever Committee or by the President of the County Medical Society.

One candidate for each Rheumatic Fever Center (with two candidates in Wayne County) will be granted. Applications are to be submitted no later than February 1, 1953.

* * *

The American Cancer Society National Campaign goal for 1953 has been set at $18,000,000.

* * *

Parke, Davis & Company of Detroit presented gold watches to some 320 employes with twenty-five years or more service, who were honored at a dinner in the Veterans Memorial Building, Detroit, on December 15. Three of the group have worked for Parke, Davis more than fifty years, the longest service record being that of John J. Hannan who joined the Company, October 25, 1900, and is still actively employed.

* * *

R. H. Pino, M.D., Detroit, spoke on "Medical Associates" and the work of the Michigan State Medical Society in pioneering this activity, at the annual "Career Night" of Southeastern High School in Detroit, on November 13.

* * *

"ILO Spells Danger!" is the title of an informative booklet just off the American Medical Association presses. The pamphlet outlines the attempt to over-rule the United States Congress and the people of this country by ratification of the International Labor Organization's convention on minimum standards of social security by a two-thirds majority of ONLY THE SENATE, would result in socialized medicine, despite the repudiation of compulsory health insurance by the American people as expressed in part on November 4.

* * *

The World Medical Association will hold its first western hemisphere conference, in conjunction with Pan American Medical Confederation on April 24, 1953, in Richmond, Virginia. One of the features of this western hemisphere conference of the W.M.A. is an invitation to the Governor of every State to send one representative, a doctor of medicine seventy-five years of age, to attend the meeting as an honor guest, to note the significant advancements and improvements that have been made in medical progress in the last fifty years.

* * *

Lester D. Bibler, M.D., Indianapolis, is the author of an interesting article, "Introducing New Members to the County Medical Society," which was published in

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Current Medical Digest for November, 1952. This story amply portrays an excellent and painless way of indoctrinating young medical practitioners into the activities and opportunities of their county and state medical societies.

* * *

The eighth annual Conference on Rural Health will be held at Hotel Roanoke, Roanoke, Virginia, February 27-28, 1953. The two themes of the session will be: "The Place of Public Health Service in County Health Councils" and "The Place of the Physician in Rural Health Activities."

On Thursday, February 26, doctors of medicine will make up state rural health committees which will meet for an afternoon discussion on "Doctor Participation in Community Programs."

* * *

Michael Reese Hospital, Chicago, announces a course in Electrocardiographic Interpretation for graduate physicians by Louis N. Katz, M.D., and associates, beginning February 11 and meeting each Wednesday from 7:00 to 9:00 p.m., for twelve weeks. For more information, write the Administrative Secretary, Cardiovascular Department, Medical Research Institute, Michael Reese Hospital, Chicago 16, Illinois.

* * *

Michigan Medical Service (Blue Shield) showed a gain of 43,899 new members during September, 1952, bringing the total gain so far this year to 196,189 new members. The total Blue Shield membership in September was 2,575,545.

The total membership of Michigan Hospital Service (Blue Cross) as of September, 1952, was 2,723,663. In Blue Cross participating hospitals, 33 per cent of the patient days were paid for by Blue Cross, 18.8 per cent by insurance companies, 7.8 per cent by governmental agencies, with the remaining 40.3 per cent being paid by the patients themselves.

* * *

Frank W. Hartman, M.D., Detroit, has been elected to succeed Harvey M. Merker, D.Sc., as president of the Detroit Institute of Cancer Research. Other newly elected officers are: Donald C. Beaver, M.D., Detroit, vice president; Dean Gordon H. Scott, Detroit, secretary; and Murray L. MacDonald, Detroit, treasurer.

The Institute is supported financially by the United Foundation, the American Cancer Society, and various private foundations. Its general research program will be extended into the fields of clinical investigation and patient care as soon as the new cancer research floor at Receiving Hospital is completed. This new floor will house twenty-four patients and provide some 10,000 square feet of laboratory, library, and animal room space.

* * *

The Shiawassee County Medical Society celebrated the Fiftieth Anniversary of its charter with a dinner party for members and their ladies at the Owosso City Club, Thursday, December 18. Edgar A. Guest, of Detroit, was the honored speaker. Honors were paid to the two living charter members: A. M. Hume, M.D.,

oldest living past president of the Michigan State Medical Society, and W. T. Parker, M.D.

Present, representing MSMS, were President R. J. Hubbell, M.D., Kalamazoo, and Otto O. Beck, M.D., Birmingham, Immediate Past-President.

* * *

The Michigan Foundation for Medical and Health Education, Inc., an activity sponsored by the Michigan State Medical Society, recently received the sum of $1,939.74 from the estate of the late Frances Alma Miller, formerly of Leslie. Mrs. Miller included a clause in her will naming the Foundation as residuary legatee.

* * *

H. T. Sethney, M.D., of Menominee, was recently feted at a testimonial dinner sponsored by the Menominee and Marinette County Medical Societies. Dr. Sethney was honored for his work as head of the staff at St. Joseph's Hospital, president of the Menominee County Medical Society, Menominee City Health Officer, and member of the Menominee Board of Education. He was presented with a plaque expressing the admiration of his colleagues "for his long service to Medicine and to humanity on the Menominee River." This two-state outpouring of M.D.'s was held in Marinette, Wisconsin.

* * *

The Clinton-Gratiot County Bar Association sponsored a dinner meeting on December 10 in St. Johns "to bring together two professional groups, the doctors and lawyers of the area." The meeting of M.D.'s and barristers featured LeMoyne Snyder, M.D., Lansing, who spoke on "Medical Evidence"; Charles E. Black, M.D., and Leo V. Walker, M.D., Lansing, who led a question-and-answer period on Pathology.

A high percentage of the membership of the Clinton County Medical Society and the Gratiot-Isabella-Clare County Medical Society attended this meeting as guests of the lawyers.

* * *

Town Needs Doctor to Fill Vacancy in March.—The village of Ashley, Michigan, with its 446 inhabitants and surrounding fertile farming land of 300 square miles, urgently needs a doctor to fill the vacancy in March when its only M.D. is to be inducted into the Armed Forces. A large and very active general practice in southern Gratiot County with large adjoining areas in other counties of Clinton, Saginaw and Montcalm, is available. Adequate hospital facilities are in Alma, 22 miles north, and in St. Johns, 18 miles south. If interested, immediately contact the village mayor, or V. L. Sheline, M.D., or Ashley, Michigan.

WHAT THEY ARE SAYING ABOUT THE NEW MSMS HIGH SCHOOL CANCER MANUAL

Donald E. Johnson, Director, American Cancer Society, Flint, Michigan—"I feel that at least we have taken a tremendously important step in cancer education."

W. W. Bauer, M.D., Director, Bureau of Health Education, American Medical Association, Chicago, Illinois—"It looks like a very useful and interesting job and should help to clear up many misconceptions. As a matter of fact, I found it very useful in helping to straighten out my thinking."

W. E. Batchelder, M.D., American College of Surgeons, Chicago, Illinois—"I believe that you have made a tremendous and most worthwhile contribution to the field of cancer education."

Norman F. Miller, M.D., Professor of Obstetrics and Gynecology, University of Michigan Medical School, Ann Arbor, Michigan—"I believe this pamphlet is one of the truly real contributions to cancer education."

A. E. Heustis, M.D., State Health Commisssioner, Lansing—"I think you have done a splendid job and the Michigan Department of Health is proud, indeed, to have been associated with its development and final production."

Mrs. Grant Hess, State Commander, American Cancer Society, Boise, Idaho—"This is an excellent manual, topping any other I have seen."

W. Kenneth Clark, M.D., Director, Division of Cancer Control, State Health Department, Pennsylvania —"It is a beautifully gotten-up booklet, and the content matter is not only easily understood but is presented in very logical sequence."

Harold W. Dargeon, M.D., Chairman, Tumor Registry Committee, American Academy of Pediatrics, New York—"Permit me to congratulate you on the production of this very valuable teaching booklet, and I am sure it would help the cancer education program tremendously if it could be distributed throughout the country as well as in Michigan."

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JOHN L. PFIRMAN, Director of Public Education, Pennsylvania Division, American Cancer Society, Harrisburg, Pennsylvania—"Your 'Story of Cancer Control for High Schools' is an excellent publication. I don't mind stating, that, in my own mind, it is far superior to the one we are now using, 'Youth Looks At Cancer.' "

HEALTH SERVICES—UNITED FUND MEMBER AGENCIES

Michigan Heart Association—finances research, education, and community service projects.

Arthritis and Rheumatism Foundation—is interested primarily in clinical research.

Sister Elizabeth Kenny Foundation—operates the Kenny Polio Center in Pontiac.

United Cerebral Palsy Association—assists in the development and maintenance of local CP centers.

National Association for Mental Health—promotes national attack on the mental health problem.

Michigan Society for Mental Health—conducts a statewide program of education, demonstration of needs, and coöperative planning in the mental health field.

Multiple Sclerosis Society—finances diagnostic and therapeutic centers in Detroit and Battle Creek.

Leader Dogs for the Blind—operates guide dog training school in Rochester.

Michigan Association for Better Hearing—promotes lip-reading classes, and has recently put in operation a mobile hearing testing unit.

American Hearing Society—conducts a national program of research and education in the field of hearing.

Michigan Epilepsy Center—works with difficult epilepsy cases, seeking to help physicians learn more about their effective rehabilitation.

National Epilepsy League—conducts nationwide attack on problems of epileptics.

Roscoe B. Jackson Memorial Laboratory, Bar Harbor, Maine—conducts scientific research and supplies controlled strains of animals to 175 research laboratories.

National League for Nursing—seeks to improve organized nursing services.

Essential State and National Services

United Defense Fund—supports U.S.O. and social hygiene services as well as important community defense services.

Big Brothers of America—promotes nationally a program of individual guidance for pre-delinquent boys.

Child Welfare League of America—protects the interests of children everywhere.

National Child Labor Committee—works to eliminate harmful employment among children.

Michigan Welfare League—works to promote adequate, effective health and welfare services throughout the state.

National Social Welfare Assembly—co-ordinates the work of social agencies nationally.

Family Service Association of America—helps local family agencies improve their services.

International Social Service—handles social problems that cross national borders.

American Federation of International Institutes—works with displaced persons and refugees.

National Urban League—works to increase co-operative relationship with whites and negroes.

National Federation of Settlements—promotes neighborhood centers for improving human relationships.

National Legal Aid—provides legal aid to those who cannot afford the services of an attorney.

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Acknowledgment of all books received will be made in this column, and this will be deemed by us as full compensation to those sending them. A selection will be made for review, as expedient.

PHYSIOLOGICAL CHANGES IN PLASMA PROTEINS CHARACTERISTIC OF HUMAN REPRODUCTION. Cross-Sectional and Longitudinal Electrophoretic Data for Women During and Following Uncomplicated and Complicated Pregnancies. By Icie G. Macy, Ph.D., Sc.D., Director of the Research Laboratory, Children's Fund of Michigan, Detroit, and Harold C. Mack, M.D., Department of Obstetrics and Gynecology, Harper Hospital, Detroit, with the technical assistance of Eliot F. Beach, Ph.D.; Margaret N. Coryell, Ph.D.; Elsie Z. Moyer, M.S.; Abner R. Robinson, M.S.; Ernest J. Schoeb, B.S., and Margaret E. Wiseman, B.S. New York: The Nutrition Foundation, Inc. Free.

This is a small paper-bound report of the results of a study on some hundred-odd individuals during and following pregnancy, from the standpoint of plasma protein fractions, which were obtained by electrophoretic studies. Some of the cases have suffered complications of pregnancy, but there is intentionally no commentary or discussion of the accumulated data. While the book represents a vast amount of work, it probably is of value only to further workers in this particular field of research.

A.A.H.

ESSENTIALS OF BODY MECHANICS IN HEALTH AND DISEASE. By Joel E. Goldthwait, M.D., F.A.C.S., LL.D., Sc.D.; Lloyd T. Brown, M.D., F.A.C.S.; Loring T. Swaim, M.D., and John G. Kuhns, M.D., F.A.C.S., Sc.D. 135 illustrations. Fifth edition. Philadelphia: J. B. Lippincott Co., 1952. Price $6.00.

A most helpful book. This vital subject is presented in a clearly and concisely written style and is well illustrated. Included is the practical application pertaining to all phases of physical activity.

A word of gratitude is due the authors for bringing this most needed subject—the correct mechanics of the body—before the medical profession and all interested in the optimum of health and physical fitness.

M.M.

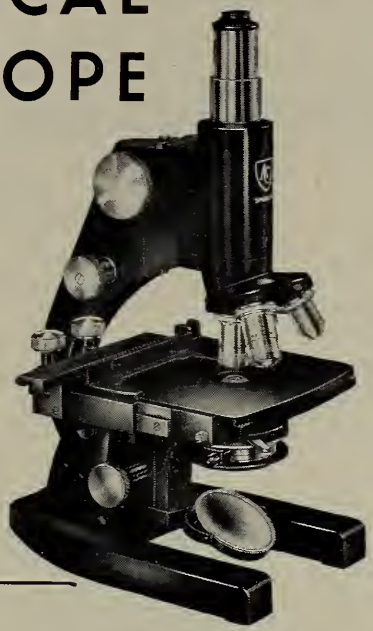
OPERATIVE NEUROSURGERY With Emphasis on Procedures in Trauma. By Elisha Stephens Gurdjian, M.D. Professor of Neurosurgery, Wayne University College of Medicine; Chief, University Neurosurgical Service, Grace Hospital, Detroit, Mich., and John E. Webster, M.D., Assistant Professor of Surgery, Wayne University College of Medicine; University Neuro-Surgical Service, Grace Hospital, Detroit, Mich. Baltimore: The Williams & Wilkins Co., 1952. Price $10.00.

The authors put a great amount of energy in the compilation of this text. The subject matter is satisfactorily covered. For each division of the nervous system there is an historical chapter, followed by a rather exhaustive review of the anatomical, physiological and pathological considerations. Diagnostic aids, neurosurgical techniques, anaesthesias and surgical facilities are adequately presented. The contents have been divided into four parts: head, spine, autonomic nervous system and peripheral

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nervous system, which illustrates a complete coverage of the nervous system. To add to the textual matter, there are extensive bibliographies as an appendix to each of these divisions. Furthermore, there is a total of 129 full page plates of black and white drawings with a variable number, ranging up to nine or ten drawings on each plate, illustrating the anatomy and surgical techniques encountered or required in the performance of a neurosurgical operation.

The authors in the preface state "that an effort has been made to give pertinent anatomic, diagnostic and technical information in the execution of certain operative procedures in neurological surgery." All this they have admirably accomplished.

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FRANK N. WILSON—IN MEMORIAM

(Continued from Page 77)

ber, 1948, but because of his love for an active life out-of-doors, he found a rest program unusually difficult. Nevertheless he continued to study the electrocardiogram and was always willing to help in the research activities of the Heart Station.

Many honors came to Doctor Wilson during his life. He was elected to honorary memberships in many important medical societies in America and in foreign countries, and in 1950 issues of both *The American Heart Journal* and *Circulation* were dedicated to him. Finally, in 1951, he was given the Gold Heart Medal by the American Heart Association. Although never very demonstrative, Doctor Wilson greatly appreciated these tokens of esteem. They helped greatly to carry him through periods of discouragement that came during his long final illness.

THE JOURNAL
of the Michigan State Medical Society

VOLUME 52 FEBRUARY, 1953 NUMBER 2

Contributors to This Issue



O. O. Beck, M.D.



J. S. DeTar, M.D.



W. S. Jones, M.D.



Nelson Taylor, M.D.



A. H. Whittaker, M.D.

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THE JOURNAL
of the Michigan State Medical Society

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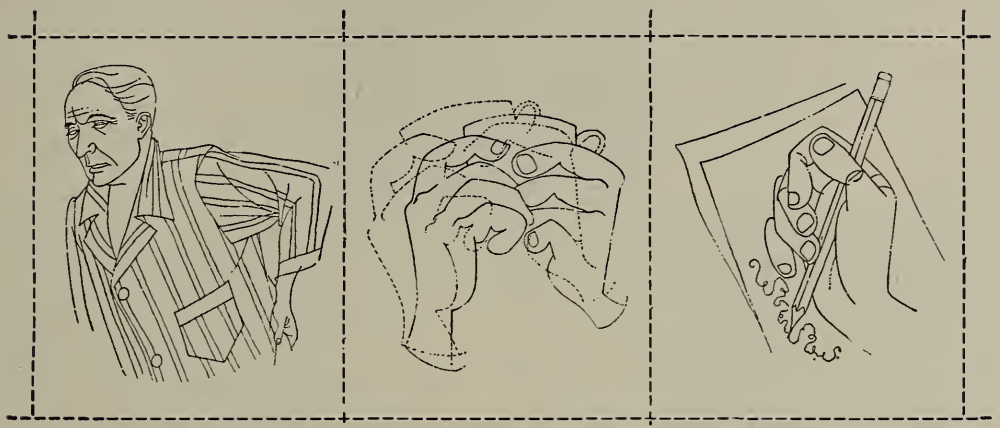
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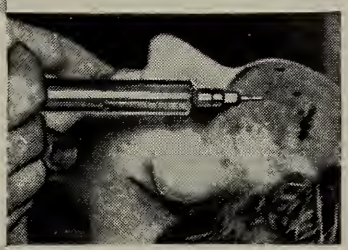
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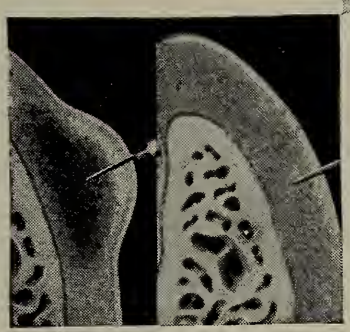
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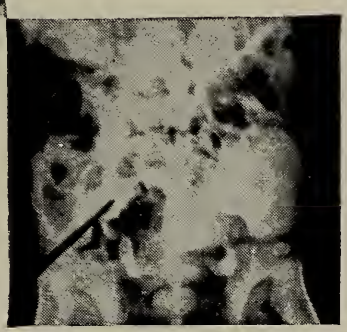
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(Continued on Page 122)



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2. Voorhees, Darrell G.: *Ann. Otol. Rhin. & Laryng.*, 60:92, Mar., 1951.
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HIGHLIGHTS OF EXECUTIVE COMMITTEE OF THE COUNCIL

Meeting of December 10, 1952

Sixty-five items were presented to the Executive Committee of The Council on December 10. Chief in importance were:

- **Reports on Beaumont Memorial Fund.** Otto O. Beck, M.D., reported total contributions to December 9 of $25,119.40—an average of $11.80 from 1,680 contributors. Dr. Beck felt that at least 60 per cent of the doctors of medicine of Michigan should become contributors to the Beaumont Memorial; he urged more effort on the local level, with stimulation from members of the MSMS Council.
- **Financial reports** were presented, studied and approved. Bills payable were presented and payment was authorized.
- **Report on AMA Clinical Session,** Denver, December 2-5, was presented by Council Chairman William Bromme and Delegates' Chairman, Wm. A. Hyland, M.D., including résumé on the important resolutions and actions of the House of Delegates and on the Public Relations Conference of December 1.
- **Committee reports**—the following were given consideration:
  (a) Cancer Control Committee, meeting of November 13; (b) Mental Hygiene Committee, November 19; (c) Emergency Medical Service Committee, November 19; (d) Exhibit Managers and MEA Officers Meeting, November 19; (e) Liaison Committee With Veterans Organizations, November 25; (f) Maternal Health Committee, December 2; and (g) Geriatrics Committee, December 2.
- **Representatives to attend the Governor's Conference on Veterans Administration,** to be held in Lansing, December 16, in the Senate Chamber of the Capitol, were appointed: President R. J. Hubbell, M.D., Kalamazoo; President-Elect L. W. Hull, M.D., Detroit; Council Chairman William Bromme, M.D., Detroit; Speaker R. H. Baker, M.D., Pontiac; and Councilor G. W. Slagle, M.D., Battle Creek.
- **The Secretary presented various recommendations** and received approval of a list of associations, hospitals, and institutions to be invited to display scientific exhibits at the September, 1953, MSMS Annual Session in Grand Rapids.
- **The Secretary reported** that the Michigan Health Officers Association had accepted invitation to meet coincident with the 1953 Michigan Clinical Institute, Detroit, on March 11; also that a meeting for Residents, Internes and Senior Medical Students would be held in Detroit at the time of the MCI, on March 11.
- **G. B. Saltonstall, M.D.,** Charlevoix, Chairman of the MSMS Committee on AMEF, was authorized to attend the annual meeting of the American Medical Education Foundation in Chicago January 25 as official MSMS representative.
- **Representatives to the regional workshop meeting on Improvement of Nursing Service** to be held in Kalamazoo January 29, 1953, were authorized to be appointed by the Councilors covering the geographic area of the meeting.
- **Report on Michigan Study Commission on Migratory Labor** and recommendations of E. F. Sladek, M.D., Detroit, MSMS representative on this Commission appointed by the Governor, were received and referred to the MSMS County Societies Committee.
- **Editor Wilfrid Haughey, M.D.,** stated The Journal would publish the names of new Doctors of Medicine as Michigan licenses are granted to them. He also announced the details of the Medical Jurisprudence Number of JMSMS (April 1953).
- **Treasurer Wm. A. Hyland, M.D.,** reported on MSMS bonds and income therefrom.
- **The Executive Committee of The Council** reiterated the MSMS policy of not permitting publication of any MSMS Committee actions or recommendations prior to approval of Committee minutes by The Council or by its Executive Committee. Since actions and recommendations of an MSMS Committee are not official until approved by The Council or by its Executive Committee.
- **Legal Counsel J. Joseph Herbert's report** included opinion re confidential communication in connection with poliomyelitis cases.

THE PRESIDENT'S COMMISSION ON THE HEALTH NEEDS OF THE NATION

The Commission on the Health Needs of the Nation appointed by President Truman under the chairmanship of Dr. Paul Magnuson, has been surveying medical problems for about a year. The commission, which expired on December 29, made its first report on December 18, 1952, issuing the first of five volumes. The first volume contains all recommendations. The report is a middle-ground proposal for solving one of the hottest issues—how to pay the doctor's bill.

The commission proposed a 1½ billion dollar annual outlay of federal and state funds to bolster

(Continued on Page 126)

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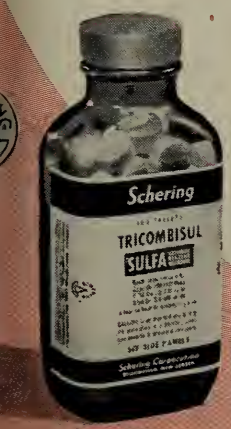
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PRESIDENT'S COMMISSION ON THE HEALTH NEEDS OF THE NATION

(Continued from Page 124)

voluntary insurance plans covering the costs of hospital and medical care for all the nation's people lacking full ability to pay.

Administered by States

The program would be administered chiefly by the states, which would match federal money dollar for dollar.

It differs both from a plan unsuccessfully espoused by President Truman and a rival proposal of the American Medical Association.

President Truman, since 1945, has vainly plugged for a federal system of pre-paid sickness insurance for 125,000,000 wage-earning Americans—to be financed by a compulsory tax on employes and employers, along the lines of the social security system.

The AMA has termed Truman's proposal "socialized medicine," and has campaigned for the extension of "voluntary" insurance plans—that is, plans which a person can purchase if he wishes.

In Chicago, Dr. George F. Lull, secretary and general manager of the AMA, said the association will have no comment on the commission's proposals "until we have had an opportunity to study the report in detail."

"A careful analysis will be made as soon as copies of the commission's report are received," Lull said.

The commission, appointed in November of 1951 to assess the nation's health needs, and to make recommendations as it saw fit, collected some two million words of testimony from experts in various fields during hearings held in Washington —and close to another million words in hearings throughout the country.

Not Up To Standard

One of its main findings was that "despite superior medical service and low death rates, Americans are not enjoying as good health as might be expected in this country."

One prime reason, the commission said in its report to Truman, was that people in low income groups can't afford adequate medical care—even on present pre-payment plans.

The commission, whose formation was termed by the AMA a "political expediency"—and was more vehemently criticized by individual leaders of the AMA—also called for:

1. The training of more doctors, nurses and other health personnel. The commission estimates there may be a shortage of anywhere from 22,000 to 45,000 doctors by 1960 depending upon the success of proposed methods of organization on a "group" basis in the meantime, unless more doctors are trained.
2. Construction of more hospitals.
3. Increased medical research.
4. Support of industrial health and of migratory workers.

Would Double Outlays

The commission estimated the federal government's share of such a program would total $1,016,000,000 annually, including the $750,000,000 for grants to states in the voluntary pre-payment plan. This would double federal health outlays.

A spokesman for the commission told a reporter that with the exception of $100,000,000 proposed for aid to medical schools, another $20,000,000 for medical research and still another $10,000,000 for federal aid in organizing medical services on a regional basis, all other funds would be on a matching basis with the states.

That is, the separate states would be expected to ante up a sum equalizing the amount placed in the kitty by the federal government—but with richer states paying more than poorer ones.

On Local Basis

On the pre-payment of medical care, the commission proposed that direct handling of the plan would be on a local basis, with federal aid money being filtered down through the states, but with the federal government checking up on the qualifications of proposed plans through a new governmental department of health and security.

This department would carry cabinet status.

The commission also proposed that a federal health commission be set up permanently to study national health problems on a continuing basis.

A three-member minority of the 16-member commission entered a dissenting opinion with respect to the majority's recommendations for financing health services on a pre-paid basis.

This minority group, which includes Walter Reuther, president of the Congress of Industrial Organizations, criticized leaving participation in the proposed health insurance program "to the option of each state."

The minority group declared that any such legislation "would discriminate against those persons whose states chose for any reason not to participate."

The group recommended that participation of each state be assured by federal statute, rather than on the voluntary basis recommended by the majority of the commission—or that the federal government take full care of the plan in states not participating.

Failing either of these, said the group, the compulsory tax plan espoused by Truman should be adopted.

The commission was headed by Dr. Paul Magnuson of Chicago and included seven doctors from university staffs, representatives of hospitals and

(Continued on Page 128)



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PRESIDENT'S COMMISSION ON THE HEALTH NEEDS OF THE NATION

(Continued from Page 126)

nurses, consumers organizations. farmers, labor and the public.

The AMA president, Dr. Louis H. Bauer, said the one particular recommendation is "so obviously objectionable, we wish to call attention to it immediately."

He said the recommendation is on Page 148B, Volume 1 of the commission report. He said it reads:

"Funds collected through the OASI (Old-Age and Survivors Insurance) mechanism be utilized to purchase personal health service benefits on a prepayment basis for beneficiaries of that insurance group, under a plan which meets federal standards and which does not involve a means test (a test to determine ability to pay)."

Hits Federal Control

"In this single recommendation," Bauer said, "the commission proposes that funds collected through the social security system be used to purchase medical care for beneficiaries covered by that system.

"Under this plan," he continued, "the federal government, through payroll deductions, would pay directly for the medical care of an ever-increasing segment of our population, and our health services would inevitably be controlled by big government."

Commission officials told a reporter the federally aided prepayment insurance plan would be aimed primarily at helping people with annual incomes of under $3,000.

But it would also provide full costs for people having no income and give some aid to those people making more than $3,000 a year but still unable to pay the full cost themselves, officials said.

How Plan Would Work

In general, here's how the plan would work—as explained in the report and amplified by commission officials:

Complete medical and hospital service and some dental service would be provided for all people who wanted it on a pre-paid basis, whether they paid the insurance premiums themselves, or got some or all financial help from the federal-state plan.

Regional authorities would be set up in the various states for the direct operation of the plans, but the insurance plans would be subject to approval by state and federal authorities. Doctors would not be in the majority on regional authority boards.

The federal government would pay full insurance costs for certain people now entitled to federal assistance, such as recipients of old age and survivors insurance. The states would pay full costs for certain people already entitled to other kinds of state benefits. All other people requiring some financial aid would get it from the pooled federal-state fund.

Commission Members

The full membership of the commission:

Dr. Magnuson, Chicago orthopedic surgeon and one-time chief of medical services for the Veterans' Administration, chairman; Chester I. Barnard of New York, chairman of the National Science Foundation, vice chairman; Dr. Lester W. Burket, dean of the University of Pennsylvania's School of Dentistry; Dr. Dean A. Clark, general director of the Massachusetts General Hospital, Boston; Dr. Donald M. Clark of Peterborough. N. H., a lecturer at Boston University School of Medicine; Dr. Evarts A. Graham, professor emeritus of surgery, Washington University, St. Louis; Albert J. Hayes of Washington, D. C., president of the International Association of Machinists; Joseph C. Hinsey of Scarsdale, N. Y., dean of Cornell University Medical College; Charles S. Johnson of Nashville, Tenn., president of Fisk University; Dr. Russel V. Lee of Stanford University School of Medicine; Elizabeth S. Magee of Cleveland, general secretary of the National Consumers League; Clarence H. Poe of Raleigh, N. C., president and editor of *The Progressive Farmer;* Lowell J. Reed, vice president of the Johns Hopkins University and Hospital; Marion W. Sheehan of New York City, director of the National Committee for the Improvement of Nursing Services; the late Dr. Ernest G. Sloman, dean of the College of Physicians and Surgeons, a School of Dentistry in San Francisco, who died during the year; and Reuther, the CIO president.

Magee and Hayes joined Reuther in the minority report regarding the prepayment plan.—Condensed from Press reports, December 18, 1952.

Ten Principles

The commission offered this ten-point statement of "principles" to guide public thinking about health:

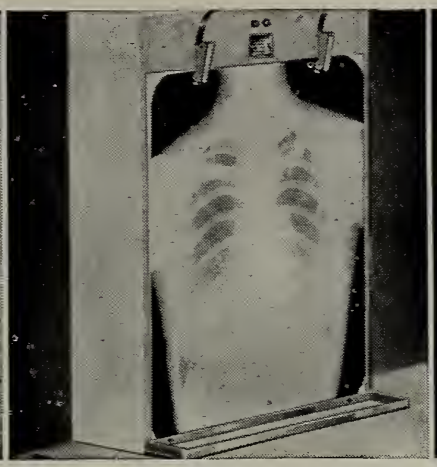
1. Access to the means for the attainment and preservation of health is a basic human right.
2. Effort of the individual himself is a vitally important factor in attaining and maintaining health.
3. The physician-patient relationship is so fundamental to health that everyone should have a personal physician.
4. The physician should have access to proper facilities and equipment, affiliation on some basis with a hospital, and the help of trained personnel in order to fulfill his part in providing comprehensive health service.
5. Comprehensive health service includes the positive promotion of health, the prevention of

(Continued on Page 130)

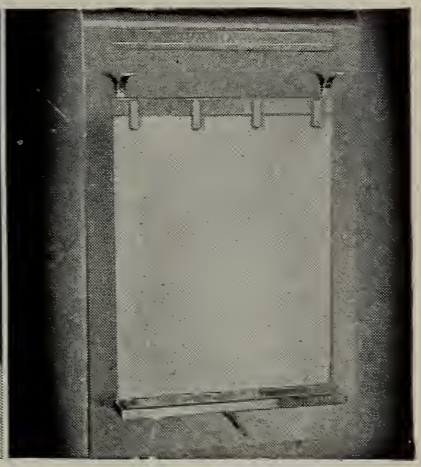
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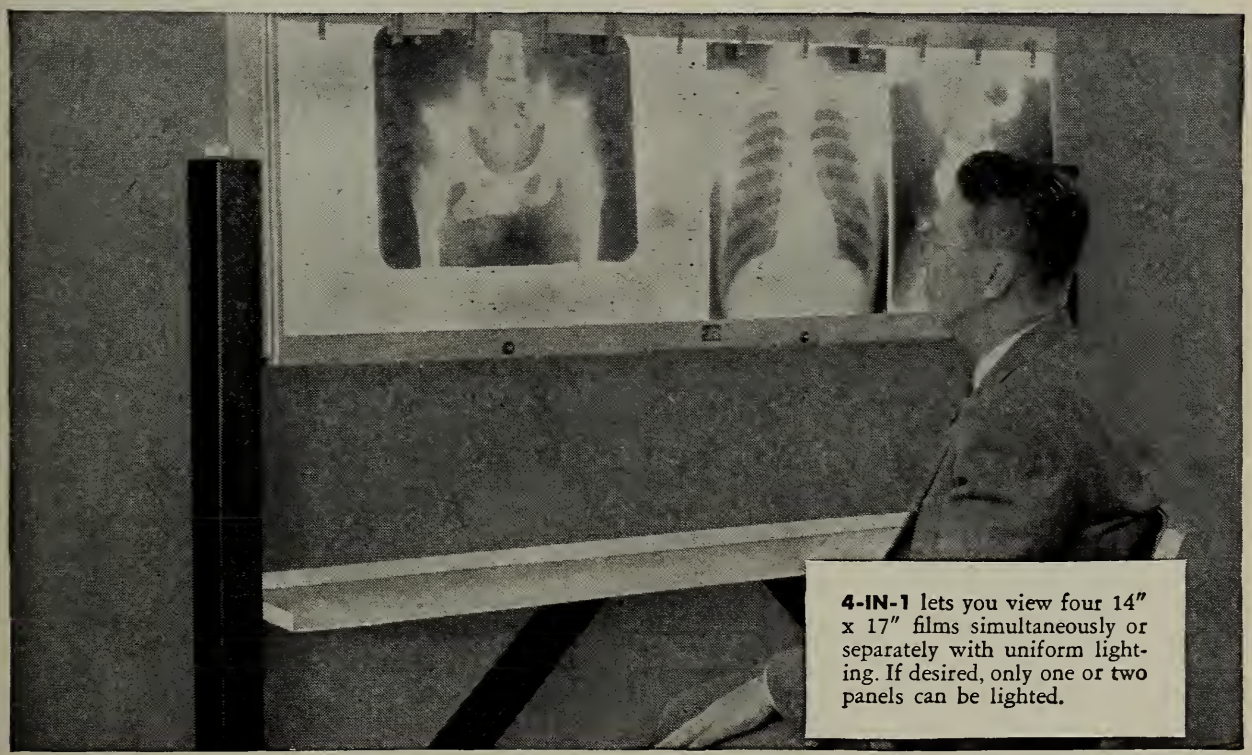
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PRESIDENT'S COMMISSION ON THE HEALTH NEEDS OF THE NATION

(Continued from Page 128)

disease, the diagnosis and treatment of disease, the rehabilitation of the disabled—all supported by constantly improving education of personnel and a continuous program of research.

6. Comprehensive health service is the concern of society and is best insured when all elements of society participate in providing it.

7. Responsibility for health is a joint one, with the individual citizen and local, State and Federal governments each having major contributions to make toward its fuller realization.

8. The American people desire and deserve comprehensive health service of the highest quality and in our dynamic society the means can be found to provide it.

9. The same high quality of health service should be available to all people generally.

10. A health program must take into account the progress and experience of the past, the realities of the present, and must be flexible enough to cope with future changes.

Creation of a Cabinet-rank Department of Health and Security

The commission decided that the interrelationship between federal health functions and general security functions ". . . is so fundamental that it indicated the desirability of combining" them. (Commissioners Evarts A. Graham and Russel V. Lee dissented, urging instead a cabinet Department of Health. Commissioner Joseph C. Hinsey advised more study.)

Also at the top level would be a permanent Federal Health Commission, similar to the Magnuson Commission, whose duty it would be to observe and report annually on all national health matters. It would contain no United States or state employes and not more than half of its members could be professional persons.

The tentative budget sets aside $1 million to finance the Commission and federal programs for industrial health and migrant workers, but does not give a breakdown of costs for the three operations.

PHYSICIANS, SKILLED LABORERS SHOW COMPARABLE HOURLY EARNINGS

The concept of overtime work at overtime pay, although familiar to most Americans, is seldom applied to a profession like medicine. If it *were* so applied, it would demonstrate that the skilled laborer and the typical doctor get roughly comparable hourly returns.

In a nationwide survey conducted recently among its 134,000 M.D.-readers, the average family doctor had a 1951 net income, before taxes, of $14,098. This bare figure doesn't take into account the extra hours the typical physician puts in.

The average family doctor's hourly base pay, assuming time-and-a-half for overtime and double-time for Sunday work, may be computed as follows:

According to our survey, the family doctor works an average of sixty-two hours a week. Twenty-two of these hours must be counted as overtime; perhaps five of these hours represent Sunday work. For pay purposes, therefore, he'd be credited with about seventy-five hours a week, or 3,750 a year . . .

The average family doctor nets $14,098 annually. Divide this figure by his hourly credits for the year (3,750) and you get the equivalent of hourly base pay. It turns out to be $3.76 an hour.

The interesting thing about this figure is its strong resemblance to current base pay for skilled union labor. Many bricklayers, for example, get $3.25 an hour nowadays. And if other workers earn less, and if medical specialists earn more, isn't this explainable in terms of *degree* of specialized skill?—*Medical Economics,* January, 1953.

PENSIONS TOO LOW, STUDY GROUP REPORTS

Although great progress has been made in providing pensions for the aged in the last fifteen years, a Congressional study group reported the average payments being made still are considerably below the subsistence level.

"The situation of the present aged is quite unsatisfactory," the report declared.

"Benefits are low, on the average considerably below subsistence except for those few, some 350,000, who are drawing pensions under both old-age and survivors insurance and private plans."

Present payments, the report went on, probably will be far too low to meet the living costs of the future.

The study forecast a national income of $600,000,000,000 annually in 1975, a vast increase in the millions of aged persons who must depend on pensions or other benefits, and warned of dangers in present systems.

The report came from the Senate-House Economic Committee, headed by Senator O'Mahoney (D., Wyo.), and resulted from a study two years ago of low-income families by Senators Sparkman (D., Ala.) and Flanders (R., Vt.).

It was prepared by the National Planning Association, a nonprofit, nonpolitical group headed by Robert M. Ball.

Most of the report and recommendations

(Continued on Page 132)

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PENSIONS TOO LOW

(Continued from Page 130)

centered around the Old Age and Survivors Insurance program, which is part of the Federal Social Security program now covering 47,000,000 workers, or about eight of 10 employed.

Ball claimed general public acceptance of these principles:

1. An opportunity for continued work or productive capacity for aged persons, those who have passed 65 years or other age limits for pensions.

2. A public program "directed to income maintenance for the aged" over and above anything individuals or unions may arrange in the line of pensions or retirement benefits.

3. Gradual elimination of "a test of need" for the basic public program of assisting the aged.

4. Contributions by both workers and employers to the public program of pensions.

5. Acceptance of private pension plans as supplements to the public program.

The study said the average monthly benefit for a 65-year-old worker under OASI was $47, that for a married couple 65 or older $80 and that for an aged widow $40.

Although Congress has provided a higher benefit rate for the future, the study questioned that this will meet expected increases in living standards and costs.

The study said the aged group most greatly in need of assistance now includes widows, unable to take or get jobs, and permanently disabled who do not qualify for veterans, blind or similar assistance. —Press release, December 26, 1952.

TAFT TO TAKE CHAIRMANSHIP OF LABOR-WELFARE COMMITTEE

Senator Taft, announcing he plans to assume chairmanship of the important Labor and Public Welfare Committee, says that in the next Congress he will concentrate on social welfare problems rather than labor legislation. In the Republican-controlled Eightieth Congress Senator Taft also headed this committee, but divided his interest between social legislation and labor, including sponsorship of the Taft-Hartley law. In explaining his attitude, the Senator is quoted as saying:

"This time my interest is more in the public welfare end of the committee's work than in the labor end. General Eisenhower has spoken of expanding the social welfare program, and I am interested in seeing that the new legislation takes the proper course."

The Labor and Welfare Committee has handled a majority of bills important to medicine, including compulsory health insurance, aid to medical education, aid to local public health departments, drug prescriptions and some veterans bills.—*Washington News, AMA Capitol Clinic,* November 18, 1952.

MEDICAL MEETINGS AND CLINIC DAYS

A list of known medical meetings and clinic days, sponsored by county medical societies and other physicians' groups in Michigan, follows:

1953

Mar. 10 MICHIGAN INDUSTRIAL HEALTH DAY
Sheraton-Cadillac Hotel, Detroit

Mar. 11-13 MICHIGAN CLINICAL INSTITUTE
Sheraton-Cadillac Hotel, Detroit

Mar. 13 Fourth MICHIGAN HEART DAY (part of MCI) Detroit

Spring MSMS Postgraduate Extramural Courses
Statewide

April 8 Genesee County Medical Society Eighth Annual Cancer Day Flint

April Highland Park Physicians Club Clinic
Highland Park

May 7 Ingham County Medical Society's Clinic Day Lansing

May 13 Wayne University Medical Alumni Clinic Day and Reunion Hotel Fort Shelby, Detroit

May 21 The American College of Surgeons Annual Symposium on Trauma and Nutrition
Ann Arbor

June 1-5 AMA Annual Session New York

June 2 Annual Clinic Day, Bon Secours Hospital
Detroit

June 19-20 Upper Peninsula Medical Society Annual Meeting Escanaba

July 30-31 Annual Coller-Penberthy Medical Surgical Conference Traverse City

August Third Annual Clinic, Central Michigan Committee, ACS Michigan Committee on Trauma, plus Michigan National Guard Medical Personnel, and Michigan Society of North Central Counties
Grayling

Sept. 22 Michigan Chapter, American College of Surgeons Grand Rapids

Sept. 23-25 MSMS ANNUAL SESSION Grand Rapids

Oct. 21 Michigan Cancer Conference East Lansing

Autumn MSMS Postgraduate Extramural Courses
Statewide

Additions to this list of meetings are invited by the Editor of JMSMS, in order to make this monthly announcement complete and accurate.

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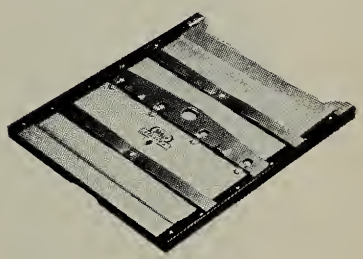
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When completed, DDT factory to be erected in Delhi, India, will be a World Health Organization training center for insecticide production. A joint project of the Indian Government, the U. N. Children's Emergency Fund and WHO, the plant is expected to be in full production by March 1954.



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PR REPORT

Current Public Relation's Activities of MSMS

Adult Education

The Genesee County Medical Society in cooperation with the Flint adult education program has set up a series of six lecture-discussion courses on mental health for the coming semester.

This venture into the mental health education field was completed with the aid of A. C. Pfeifer, M.D., Mt. Morris, President of the Genesee County Medical Society.

The participating doctors of medicine and their subject matter include "Emotional Problems of Parent and Child," T. J. Lukens, M.D.; "Alcohol and Mental Health," Clayton K. Stroup, M.D.; "Psychosomatic Problems," Glenn E. Drewyer, M.D.; "Mental Problems Relating to Sex Education," Joseph Shapiro, M.D.; "Nervous and Mental Systems," Seymour L. Osher, M.D.; and "Problems of Aging," Paul H. Jordan, M.D.

* * *

Adult Education programs to date either have been presented or are in the process of being presented in a total of 14 Michigan communities under the sponsorship of 10 county medical societies.

The County Medical Societies represented with current or former programs are Bay, Genesee, Ingham, Jackson, Macomb, Marquette-Alger, Menominee, Oakland, St. Clair and Tuscola.

Other county medical societies are urged to begin an Adult Education series in their communities. Details on how to launch such a program in a locality can be obtained by contacting the MSMS Field Secretaries in your areas or by writing direct to the Michigan State Medical Society Public Relations Department in Lansing.

Latest Developments

Two new projects—a series of five-minute television shows and an exhibit—are now being prepared by the MSMS Public Relations Department.

1. The television shows will be filmed and packaged into 13-week units so that they can be used on any television station in Michigan. The programs will cover a variety of scientific and socio-economic topics. Doctors of medicine from all over the State will have an opportunity to participate in these programs.

2. The new exhibit will be unveiled at the Michigan Clinical Institute in Detroit, March 11-12-13, 1953. It will be available to county medical societies for use at fairs this summer and autumn.

More details on both of these new developments will appear on this page in a subsequent edition of The Journal.

Films Available

Motion pictures tell a story and sell ideas.

Three MSMS films are available to you to present the story of the medical profession in three important fields. You can use them in your Adult Education programs or screen them before service clubs and other organizations in your community.

The three films are "Lucky Junior," the story of immunization; "To Save Your Life," which tells how to become an M.D. and the costs involved; and "To Your Health," about compulsory health insurance.

You may obtain these interesting motion pictures by sending a request to the Michigan State Medical Society PR Department at Lansing.

"Medical Mailbox"

MSMS Television Program

WXYZ-TV (Channel 7), Detroit **Friday, 12:30 p.m.-1:00 p.m.**

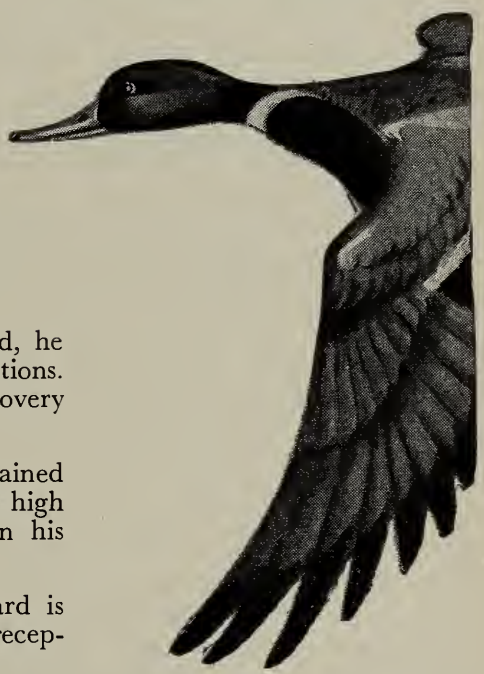
Participant	*Topic*	*Date*
W. Z. Rundles, M.D., Flint	Clinical Use of the Audiometers in Industry	January 30
Martha L. Wells, M.D., Detroit	Proctology	February 6
John G. Bielawski, M.D., Detroit	Rheumatic Fever Control Program	February 13
E. I. Shumaker, M.D., Dearborn	Kidney Diseases	February 20
Harold J. Kullman, M.D., Detroit	Veteran Rehabilitation	February 27
E. S. Gurdjian, M.D., Detroit	Ruptured Discs and Their Surgical Care	March 6





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Ingham County Promotes Postgraduate Education

The Ingham County Medical Society will celebrate a silver anniversary in 1953. On April 26, 1928, the County Medical Society held its first Spring Clinic to which the medical profession of the State of Michigan was invited. Two hundred and twenty-seven doctors responded. As far as we can determine, this was the first clinic to be held in Michigan under the auspices of a county medical society.

Five years elapsed between the date of this first clinic and the second clinic held by the Ingham County Medical Society. Though the seed of the clinic idea was long in coming into bloom, germination of the idea was not so long delayed. The record shows that Drs. Milton Shaw and L. G. Christian proposed in 1931 that the Society hold an *annual* Spring Clinic. Successive clinics were held in 1933 and in 1935. From 1935 to the current date the Ingham County Medical Society has had a clinic day each year.

Although the actual date of the clinics has varied between late April and early May through passing years, custom has now fixed the date as the first Thursday in May and an increasing number of practitioners in Michigan mark this date as a "must" on their calendar.

The type of program also has varied from year to year. At various times the clinic has taken the form of a round table or a symposium on a particular subject. The most common and by far the most popular type of program has been one made up of four afternoon speakers and one after dinner speaker in which the subjects presented have covered widely different aspects of the practice of medicine. Although the subject matter presented in each clinic and from year to year has been varied, the general and specific objective has been the same throughout the years. The Ingham County Medical Society has proposed to bring to the average general practitioner of medicine current and practical information usable in his daily practice of the art and science of medicine.

Top-Notch Speakers Are Presented.—The list of speakers at the first clinic in 1928 included: W. C. Alvarez, J. C. Beck, J. T. Case, F. A. Coller, John Phillips, M. F. Porter and H. A. Reye. This list of distinguished gentlemen set the tempo for the caliber of speakers for succeeding meetings. Although speakers have been drawn from the entire geographic area of these United States and from England, the majority have come from the great reservoirs of medical teaching and practice in the Central States. Cleveland; Chicago; Rochester, Minnesota; Detroit and Ann Arbor vie statistically with each other for the honor of furnishing the greatest number of speakers. It has been interesting to note that the name of F. A. Coller appears three times in the records of the clinics and E. H. Rynearson twice. Nor can one help but stop and rejoice that we have been given the opportunity to bring to Michigan such individuals as the now immortal George Crile, Chevalier L. Jackson (Sr.), and W. T. Vaughan.



Milton Shaw, M.D.



L. G. Christian, M.D.

The quality of the speakers at the clinics and the suitability of the programs presented may be best attested by the record. The attendance at the first clinic was 227. In spite of an increasing number of sectional, regional and local meetings at this particular time of the year, the attendance has increased steadily from year to year except for the last war years. A review of registrations in the early clinics shows that practitioners came from as far east as Port Huron, as far west as Muskegon and Holland and as far north as Grayling and Gaylord. The geographic pattern of attendance has not changed through the years. The Ingham County Medical Society expects to see the same friends at each clinic and to make new ones also.

Many medical men already have reserved the first Thursday in May, 1953, for the twenty-fifth Anniversary Clinic of the Ingham County Medical Society.

Note—Some months ago the Editor asked County Medical Societies to prepare feature stories outlining some outstanding, or meritorious activity of the Society. We would be glad to feature some others. This story is a proud recital—Editor.

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Cancer Comment

CO-ORDINATING FUNCTIONS OF THE CANCER CONTROL COMMITTEE

The magnitude of the cancer problem is apparent to physicians and laymen alike. Over the years a number of organizations have been formed to deal with some aspect of the challenge of malignancy. In Michigan four major organizations are active in this field. Two are professional in character and two are non-professional. The two non-professional groups are separate and co-ordinate divisions of the American Cancer Society. The American Cancer Society is a superb national group which has done much to bring the problems of cancer before the lay public, and by collecting large sums of money has made possible advances in research and treatment. The Southeastern Michigan Division of the American Cancer Society encompasses Macomb, Oakland, and Wayne counties which form metropolitan Detroit, while the Michigan Division represents the rest of the State. Each of these divisions has a number of prominent physicians on its board of directors, thus enabling these organizations to have competent and interested medical advice. The other two organizations interested in these endeavors are the State Department of Health and the Michigan State Medical Society. The emphasis of the activities of these two groups is mainly on the professional aspect of cancer control.

It is understandable that some sort of liaison should be maintained among these four groups. The Michigan State Medical Society is in a unique position in that the professional leaders and advisors of the other three groups are also members of the state medical society. The personnel of the Cancer Control Committee of the Michigan State Medical Society has been selected to represent all cancer groups in the State. The deliberations of the Cancer Control Committee should provide a common ground for the exchange of ideas and for promotion of knowledge on the part of its members of what the other fellow is doing. For example, the subcommittee of the state medical society on community cancer projects should be composed of physicians who are advisors to the community projects groups of the other three organizations. The advantage of this arrangement is self-evident. A major step along this line of co-ordination of activity has been the request by the State Health Commissioner for the formation of a special co-ordinating subcommittee of the Cancer Control Committee to act as advisors in the matters of cancer control being carried out by the State Health Department. This committee is composed of leaders in the other three organizations and will also act as advisor to all organizations requesting assistance.

The Michigan State Medical Society through its Cancer Control Committee cannot and will not become involved in the internal affairs of the other three organizations. However, it can be a source of advice in broad principles of policy, in integration of projects, and in the proper scheduling of endeavors.

Realizing that any cancer control program must function at the "grass roots" level, the Cancer Control Committee has endeavored to stimulate local co-operative action by distributing "The Role of the Cancer Committee of the County Medical Society in the Cancer Control Program" to all local medical societies, health departments and cancer units in Michigan. This short pamphlet points out the duties of each local group in any local cancer education or service program.

The Cancer Control Committee recently has made another contribution to cancer control in Michigan by distributing "The Story of Cancer For High Schools" to all public and parochial high schools in the state. This was a co-operative undertaking in that the Michigan Department of Health directly paid for most of the first printing of 5,000 copies. The local cancer units over the state distributed the manuals to each high school in their areas.

These are but two recent examples of co-operative effort at cancer control outlined earlier in this discussion. Many other similar opportunities doubtless will arise during the coming year.

The growing margin of a tumor provides the most dependable diagnostic picture.

* * *

As a rule, malignant tumors of infants and children progress rapidly and metastasize widely, recurrence is prompt and the mortality high.

* * *

Blue-black, green-black, or slate colored moles, are prone to become malignant.

* * *

Moles on the foot and in places exposed to constant irritation or chafing should be removed.

* * *

Operative removal of tumors of the central nervous system is the only possible treatment; however, results have been discouraging.

* * *

The common neoplasms seen in children logically fall into four groups; namely, malignant lymphomas, intracranial neoplasms, abdominal tumors, and primary malignant tumors of bone.

* * *

It is not so much the frequency of childhood cancer that is important but the risk to life involved if the disease is overlooked.

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ACCEPTED COUNCIL ON FOODS AND NUTRITION AMERICAN MEDICAL ASSOCIATION

Heart Beats

FOURTH ANNUAL MICHIGAN HEART DAY PROGRAM

The Michigan Heart Association has planned another outstanding and diversified scientific program for presentation at its Fourth Annual Michigan Heart Day to be held in Detroit on Friday, March 13, 1953. Heart Day has been scheduled again this year in conjunction with the Michigan Clinical Institute (March 11-13) at the Sheraton Cadillac Hotel, Detroit.

The Heart Day program will offer a wide variety of reports covering investigations of various aspects of diseases of the cardiovascular system. This is another service to Michigan's Doctors of Medicine by the Michigan Heart Association through its continually expanding professional education program.

The Michigan Heart Association deeply appreciates the opportunity of providing this excellent program as an integral part of the Clinical Institute.

In keeping with an established and successful policy, three of the papers which will be presented at this meeting will be given by Michigan medical doctors who are carrying out research studies under the financial sponsorship of the Michigan Heart Association. Three other scientific papers will be presented by Doctors of Medicine from various sections of the United States.

The schedule for Heart Day and the speakers who will appear on the program is as follows:

9:00-9:20 a.m.

Harold B. Houser, M.D., Assistant Research Director, Weiting-Johnson Hospital, Syracuse, New York, will discuss the prophylaxis of rheumatic fever by prevention of or treatment of streptococcal infection. Dr. Houser was just recently separated from the Armed Forces where he served as a Major (MC) with the Streptococcal Disease Laboratory, Warren Air Force Base, Wyoming.

9:20-9:40 a.m.

Harper K. Hellems, M.D., Wayne University College of Medicine, Detroit, will report on the extensive studies which he has carried out on the medical indications for mitral commissurotomy. Dr. Hellem's important work has been supported by a Michigan Heart Association research grant.

9:40-10:00 a.m.

F. D. Dodrill, M.D., Research Repartment of Harper Hospital, Detroit, will present a paper concerning some aspects of the mechanical heart-pump. The mechanical heart has been rated one of the top ten scientific developments of 1952. The Michigan Heart Association has provided financial support for this project since its inception.

10:00-11:00 a.m.

Intermission to view exhibits.

11:00-11:20 a.m.

Edward M. Kline, M.D., Clinical Instructor of Internal Medicine, Western Reserve University, Cleveland, Ohio, will speak on the subject of "The Role of the Physician in the Employment of the Cardiac Worker." Dr. Kline is well known for this work in the field of industrial cardiology and is currently serving as Chairman of the Cardiovascular Section of the Industrial Medicine Association.

11:20-11:40 a.m.

Robert A. Gerisch, M.D., Harper Hospital, Detroit, will provide the latest developments on the use of ACTH and cortisone in the treatment of myocardial infarction. This research study has received nationwide prominence. The Michigan Heart Association is providing financial assistance to this project also.

11:40-12:00 m.

William B. Kountz, M.D., Assistant Professor of Clinical Medicine, Washington University, St. Louis, Missouri, will discuss "Heart Diseases of Mid-Life." Dr. Kountz is nationally known in the field of Geriatrics.

Henry L. Smith, M.D., Detroit, President-Elect of the Michigan Heart Association, will serve as Chairman of the Fourth Annual Heart Day.

E. D. Spalding, M.D., Detroit, will be Leader of the Discussion Conference from 12:00 noon to 1:00 p.m. in the Grand Ballroom of the Sheraton-Cadillac Hotel. All the Heart speakers have been invited to sit on the platform for this question period, always a highlight of the annual Michigan Heart Day.

Dr. Henry L. Smith will be installed as the Association's fifth president at a meeting of the Board of Trustees which has been scheduled for 6:30 p.m. in the Founders' Room of the Sheraton-Cadillac Hotel. The annual meeting of members of the Michigan Heart Association will be held at 5:00 p.m. in Parlors G-H-I of the Sheraton-Cadillac immediately following the close of the Clinical Institute.

HOW TO INCREASE THE PROTEIN INTAKE

without Patient Resistance

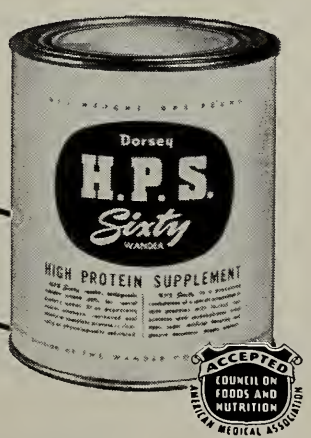
Patient resistance is rarely encountered when **H.P.S. *Sixty*** is prescribed to increase protein alimentation. This high protein supplement was carefully formulated to insure taste acceptance even when regular feedings are refused. Prepared with water or milk, it makes a universally acceptable beverage of bland taste, not unlike that of a milk shake.

60% PROTEIN in readily digested form

Consisting of intact proteins derived from milk, soybeans, and egg, **H.P.S. *Sixty*** provides 60 per cent protein and 27 per cent carbohydrate. Three servings prepared with milk provide 95 Gm. of readily digested, biologically complete protein. Prepared with water, 3 servings provide 77 Gm. of protein. **H.P.S. *Sixty*** is indicated whenever the protein intake must be sharply increased: pre- and postoperatively, to correct nitrogen loss following burns and hemorrhage, and in hepatitis, hepatic cirrhosis, malnutrition, pregnancy and lactation, and nephrosis.

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AMA News Notes

HOUSE ACTION ON FEDERAL MEDICAL SERVICES

After long debate, the AMA's House of Delegates adopted a resolution stating that the fundamental consideration of limiting the care of veterans in Veterans Administration hospitals to the two following categories is sound: (1) to veterans with peacetime or wartime service whose disabilities or disease are service-incurred or aggravated and (2) to veterans with wartime service suffering from tuberculosis or psychiatric or neurological disorders of non-service-connected origin, who are unable to defray the necessary hospital expenses.

The resolution further comments that to discontinue the provision of medical care and hospitalization in VA hospitals for the remaining groups of veterans with non-service-connected disabilities cannot be accomplished without the co-operation of Congress, veterans organizations and the medical profession. The House of Delegates recommended that the AMA meet with representatives of veterans organizations, the American Hospital Association, American Dental Association, the Department of Defense, and the Veterans Administration to discuss problems and work out a satisfactory arrangement . . . rather than take action at the present time.

Other recommendations include: a definitive AMA policy on the subject of dependent medical care should be deferred until more study has been made; transferring of seriously disabled service personnel from service hospitals to VA installations should be continued; a clear congressional definition of the extent of government's responsibility for furnishing medical care to veterans with non-service-connected disabilities and dependents of service personnel should be obtained; a federal board should be established to allocate the number of beds required by the several federal hospital services to insure joint planning in the field of civilian and federal hospital construction and to determine the need and location for proposed new hospitals in the country.

AMA TO CONTINUE STUDY OF DOCTOR DRAFT LAW

The AMA's House of Delegates voted in December to "continue to support whatever measures are necessary to provide essential medical care to the armed services."

The House further authorized and directed the Board of Trustees and the Council on National Emergency Medical Service (1) to follow closely all developments both national and international which might affect the quantitative requirements for medical officers in the armed forces, and (2) to support legislation to provide the number of medical officers required to care adequately for the health needs of the uniformed armed forces.

The House recommended that the President of the United States be requested to defer any call-up of priority three physicians under Public Law 779 until the Selective Service System and the Department of Defense have completed processing all physicians in priorities one and two, except for physicians in those groups whose deferment is essential to the nation's health.

Careful study also is to be given in the ensuing months to—physical requirements for medical officers so that physicians with physical defects may be utilized; more effective recruitment methods for career personnel in military medicine; greater use of civilian physicians and hospital facilities in the care of both military and nonmilitary personnel and their dependents; uniform conditions of service to avoid undue competition for medical personnel, and consideration of an equitable point system in the induction of physicians into the armed services.

AMA ENCOURAGES "MEDICAL CARE FOR ALL" PROGRAMS

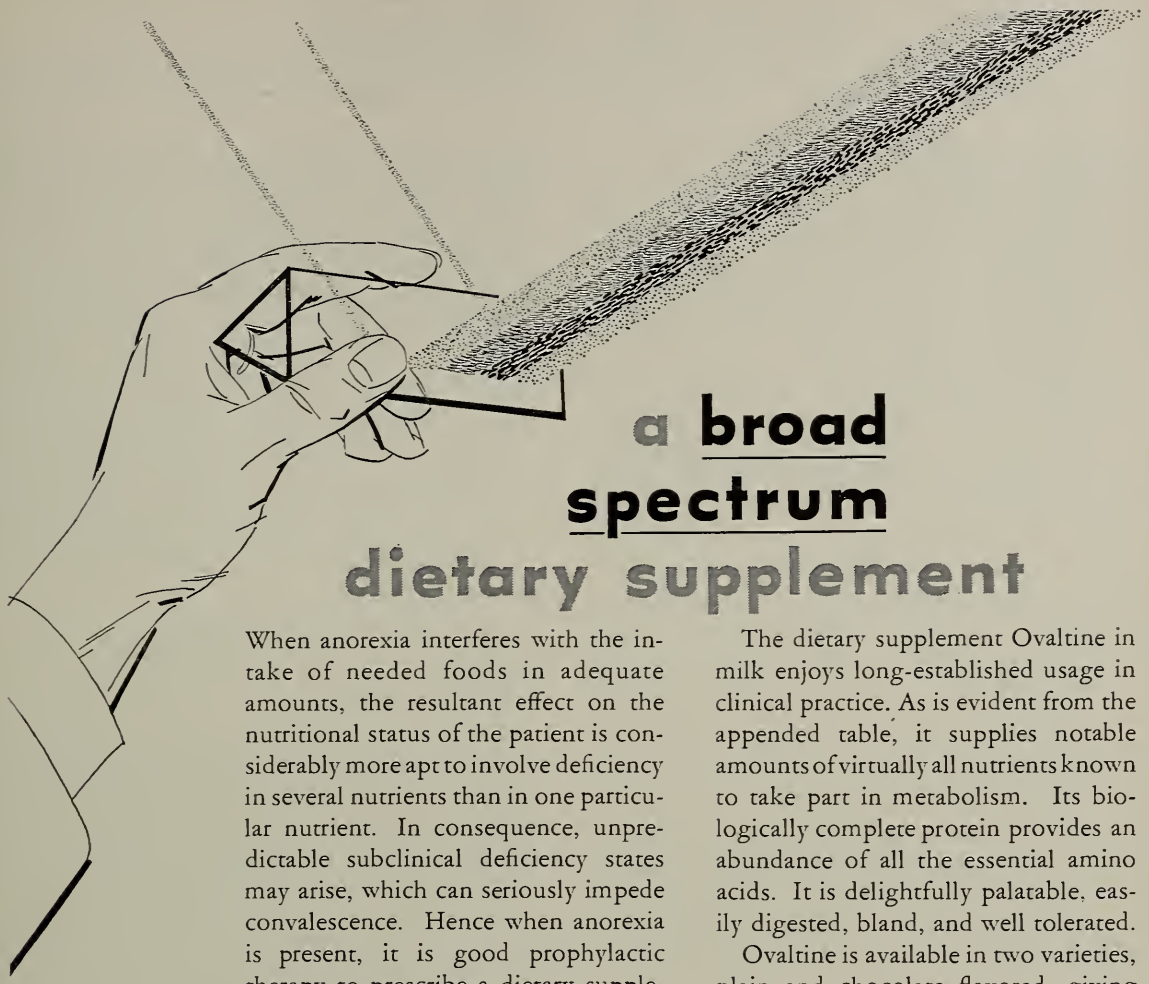
Medical societies were called upon to establish programs providing the services of a physician to anyone unable to pay for such services at the AMA's House of Delegates session in December. Since a number of county medical societies for several years have successfully maintained such programs, the House resolution urged the American Medical Association to encourage constituent state medical societies "to organize and vigorously promote similar campaigns embodying the principles of such programs." Medical societies were urged to publicize such programs "through every effective medium of communication."

AMA REVISES THE "ESSENTIALS OF AN APPROVED INTERNSHIP"

An Advisory Committee on Internship, appointed by the Council on Medical Education and Hospitals in the fall of 1951, conducted a study in the past year reviewing the internship in its broadest aspects. As a result of its study the Advisory Committee recommended revisions in the "Essentials of an Approved Internship" which were ratified by the AMA's House of Delegates in December.

Among the changes in the requirements for hospitals offering intern programs were the following: Approval by the Joint Commission on Accreditation of Hospitals; bed capacity increased to 150, excluding bassinets; annual admissions in-

(Continued on Page 160)



a broad spectrum dietary supplement

When anorexia interferes with the intake of needed foods in adequate amounts, the resultant effect on the nutritional status of the patient is considerably more apt to involve deficiency in several nutrients than in one particular nutrient. In consequence, unpredictable subclinical deficiency states may arise, which can seriously impede convalescence. Hence when anorexia is present, it is good prophylactic therapy to prescribe a dietary supplement of broad nutrient spectrum, capable of improving the intake of virtually all indispensable nutrients.

The dietary supplement Ovaltine in milk enjoys long-established usage in clinical practice. As is evident from the appended table, it supplies notable amounts of virtually all nutrients known to take part in metabolism. Its biologically complete protein provides an abundance of all the essential amino acids. It is delightfully palatable, easily digested, bland, and well tolerated.

Ovaltine is available in two varieties, plain and chocolate flavored, giving choice according to preference. Serving for serving, both varieties are virtually alike in their wealth of nutrients.

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Three Servings of Ovaltine in Milk Recommended for Daily Use Provide the Following Amounts of Nutrients

(Each serving made of ½ oz. of Ovaltine and 8 fl. oz. of whole milk)

MINERALS		VITAMINS	
*CALCIUM	1.12 Gm.	*ASCORBIC ACID	37 mg.
CHLORINE	900 mg.	BIOTIN	0.03 mg.
COBALT	0.006 mg.	CHOLINE	200 mg.
*COPPER	0.7 mg.	FOLIC ACID	0.05 mg.
FLUORINE	3.0 mg.	*NIACIN	6.7 mg.
*IODINE	0.15 mg.	PANTOTHENIC ACID	3.0 mg.
*IRON	12 mg.	PYRIDOXINE	0.6 mg.
MAGNESIUM	120 mg.	*RIBOFLAVIN	2.0 mg.
MANGANESE	0.4 mg.	*THIAMINE	1.2 mg.
*PHOSPHORUS	940 mg.	*VITAMIN A	3200 I.U.
POTASSIUM	1300 mg.	VITAMIN B_{12}	0.005 mg.
SODIUM	560 mg.	*VITAMIN D	420 I.U.
ZINC	2.6 mg.		

*PROTEIN (biologically complete)	32 Gm.
*CARBOHYDRATE	65 Gm.
*LIPIDS	30 Gm.

*Nutrients for which daily dietary allowances are recommended by the National Research Council.

Editorial Comment

UNIONISM IN MEDICINE

This subject has been a standing joke in the medical profession for the last two years. Like most jibes, it has a sincere and deep-rooted basis in fact. Despite any humorous connotation there is here, the truth of the matter is that it needs to be stopped and stopped now.

When various academies and boards were organized, they were formed for the purpose of trying to improve all standards in a particular division of medicine. For example, the American Academy of General Practice was incorporated for the purpose of raising the level of practice of its members.

It is not, and never has been, the intent of these organizations to take on political connotations, but such powers as any group may wield must have some political meaning. This is a double-edged sword. Used for good, such influence may do much to improve standards. Used purely for political purposes, such powers are dangerous to medicine as a whole.

Never, in the basic thinking of the academies and boards has there been the slightest attempt to limit the practice of medicine to their own members. Yet, through the mistaken ideas of some more interested in money than in medicine, this has been done.

Many a large hospital is no more than a closed union shop where each worker must have a card to get a job at all. Rigid seniority is followed. The question is not "How good is the man?", but "How long has he been a member of the union and the shop?"

Jurisdictional disputes are common. The bone setter's union raises the very devil if a member of the child doser's union so much as looks at the child's broken finger. Forgotten completely is the basic objective of public service. Emphasis is on the mad scramble to keep up the union bars and see that no scab is allowed to work. Even undertones of collective bargaining are becoming apparent. With the closed shop, prices can be kept up and men who might be a bit critical of policy can be hushed up in a hurry.

Many medical organizations at the local level have begun to partake of all the worst features of labor unions without accepting the good features. There is nothing wrong with the labor union, but I will refuse to admit that a physician comes in the category of labor.

That the physician is essentially a laborer is the contention of those who would force regimentation upon us. There is no easier way to allow the advocates of socialized medicine to gain their ends than to play into their hands by behaving as lower bracket workers, rather than as professional men.

It is my contention that unionism is one of the finest things that has happened for the laborers of this country. It should be supported. But, unionism has no place in any public service or profession. If the doctor wishes to become a laborer, he has certainly started properly to achieve this end. Contrariwise, if we wish to maintain the dignity of a profession, then the only qualification for a man's advancement must be his integrity, diligence, and skill. All thoughts of the "closed shop" must be abandoned.—Paul Williamson, M.D., Editorial, *General Practitioner,* October, 1952.

EFFECTS OF BASIC SCIENCE LAWS

"The gates are wide open now. In 1940 there were 435 osteopaths registered in Michigan; in 1950 this has increased to 907, an increase of over 100 per cent in ten years, during which time the basic science law was in effect. Chiropractors registered in Michigan increased from 492 in 1940 to 747 in 1950, an increase of 50 per cent. There are some 11,000 osteopaths in the United States. On a population basis, we should have about 4 per cent of them. Actually we have between 8 and 9 per cent, and all this has come about with our basic science law in full effect. Does our law keep them out? Most definitely not. People will ask 'How do those of other schools get into the state, then?' A few come in by examination, most of them by reciprocity in basic science with Minnesota, Nebraska, and Arkansas—chiefly Minnesota. In 1949 Michigan issued 126 basic science certificates by reciprocity—only thirty-eight of these to medical doctors, the rest being to osteopaths, chiropractors, and unclassified. It must be granted that if our law were repealed we would probably have more than ever of the other schools for a short while. Soon, however, our state would secure enough medical doctors and the situation would take care of itself. Many people are cared for by non-medical men because there is no medical care available.

"States without basic science laws are not overloaded with those of other schools. Illinois has 12,795 medical doctors and less than 500 osteopaths. Ohio has 9883 medical doctors and less than 500 osteopaths. Neither state has a basic science law. When there is enough medical care available, the other types of practitioners fade away to a large extent.—Editorial, *The Pennsylvania Medical Journal,* September, 1952.

HEALTH INSURANCE PREMIUM WAIVER

Can the medical, hospital insurance policy holder be protected as to premium payments when he is unemployed or otherwise unable to meet his obligation?

It is being demonstrated daily that superior medical care can be delivered to the American people through the medium of the voluntary, prepaid plans, such as Blue Shield and Blue Cross. And, it is being done without resorting to mass care techniques, without dictation to the patient as to choice of doctor or without a waiting period for the decision of a bureau when a citizen wishes to "fire" his doctor or desires the services of a specialist. Both the patient and the doctor remain as free as thought, under our voluntary prepaid plans. And, the patient is pleased with the service he is getting and the way in which it is delivered to him. The steady increase in enrollment in the voluntary plan is the undeniable evidence of its success. This success is all the more remarkable because it has been achieved in spite of some justifiable worries that beset the policyholders. They worry about the day when unemployment may overtake them and protection is lost because the program, carried by the employer or the employe, lapses for non-payment of the premium or because the group advantage has become inoperative. They worry about being able to pay the premium when retirement comes; when income depends on a fixed pension or, worse still, on Social Security alone. And, such worries are well founded.

By paying a relatively small additional amount, it is possible to protect one's life insurance against periods of total disability—or it is possible to arrange premium payments in such a way that one need not pay beyond a stipulated number of years, e.g., a Twenty Pay Life policy. The premium of straight life insurance is great enough to build up cash values which automatically extend the protection, even after the policyholder discontinues payment.

We believe a careful exploratory study should be made to find out if the life insurance principle of protection can be applied to medical and hospital insurance policies so they can function when needed most by the policyholder—when he is out of money to buy his protection.—Frank A. Weiser in *Detroit Medical News,* Nov. 3, 1952.

CABINET RANK FOR OVETA

When President-elect Eisenhower's Cabinet convenes after his inauguration, he has promised that Mrs. Oveta Culp Hobby will attend, although as the new Federal Security Administrator she will not have cabinet status.

Thus the importance of her post is recognized, although not officially. Perhaps it would be to the nation's advantage if Congress raised the Federal Security Agency to full cabinet rank.

Although comparatively new, the FSA is of major importance by the very nature of its many functions which closely touch the lives of every American citizen. The agency has more employes than either the State or Labor Departments.

Under Mrs. Hobby's jurisdiction will not only be Social Security, but the Food and Drug Administration, Office of Education and the Public Health Service. From the public standpoint, no department of the Federal Government is of more vital concern to the individual American or to the country's social progress.

Cabinet status for the Federal Security Administrator has been discussed before, but it is said that Congress was reluctant to act as long as the post was held by Oscar Ewing, the advocate of socialized medicine whose political philosophy had a leftward slant.

Mrs. Hobby, who will replace Ewing, promises to be a middle-of-the-road administrator with none of her predecessor's socialistic ideas.

With the FSA safely under her direction, Congress may be more favorably inclined toward giving her department equal footing with others of cabinet rank.—*Detroit Free Press,* December 8, 1952.

ARE WE WAITING FOR $5 BUTTER?

The point is well taken by the Northern Trust Company, of Chicago, that "the magnitude of the tax burden now is hardly realized by the great mass of the public." In spite of all the hullabaloo about high taxes, few persons even in low income groups are aware that about 20 per cent of their incomes are consumed by taxes. In the $3,000-$5,000 income group, taxes of all kinds take 25 to 30 per cent of incomes. The Chicago bank's October Business Comment observes that skimpy knowledge concerning taxes results from the method of the Federal income levy's collection ("for the most part (it is collected) before the pay envelope is received") and from "the difficulty in recognizing and adding up the multitude of hidden taxes."

Among those hidden taxes are, of course, the 8-cent Federal excise tax on cigarettes (the amount of which does not appear on the tax stamp itself); a 20 per cent levy on photographic materials; 10 per cent on television sets, radios and most household appliances; 15 per cent on fountain pens and mechanical pencils; 20 per cent on toilet preparations; 25 per cent on toll telegraph, telephone and radio messages, and 15 per cent on transportation. Excise and sales taxes now amount to between 15 and 20 per cent of total tax receipts, and siphon off approximately 8 per cent of incomes in the lower brackets. Another "hidden" tax is the corporate income levy, which by bringing in its wake higher prices, is estimated to absorb 5 per cent of lower bracket incomes.

Last year Federal taxes took about 24 per cent of the national income. This compares with 4.4 per cent in 1929. Primarily responsible for the phenomenal increase, as the Northern Trust Company

notes, is the nation's heavy expenditure for military goods. But what needs to be appreciated more keenly is that nonmilitary expenditures have grown much faster than national income. Nonmilitary expenditures in 1929 were only 1 per cent of the national income; today they amount to 7.3 per cent. The total of the two categories—military and nonmilitary—has reached a point at which the taxes themselves become inflationary.

It may be, as Harold Stonier, executive vice-president of the American Bankers' Association, observed the other day, that "people in general will not be bothered much about inflation (or high taxes, either) until it takes $5 to buy a pound of butter or a quart of milk or $50 for a pair of new shoes for their kids. . . ." Certain steps can be taken, however, to halt this upward trend. Responsibility for paying Federal income taxes needs to be placed back where it belongs, on the individual taxpayer, and the amount of excise taxes should be affixed plainly to those articles on which excises apply. These would be two concrete moves in the right direction.—Editorial, *The Richmond News Leader,* October 16, 1952.

ARMY EXAMINATIONS

I don't know why somebody doesn't give you a tip on what to wear for these Army examinations. I was running around stark naked, except for my hat, with my topcoat, suit, shirt, et cetera, all balanced on my right arm. Why didn't somebody tell me to leave my hat home and to wear a sweatshirt and overalls? The whole business would have been a bit annoying, if it hadn't been for the fact that everybody else looked so funny. Bald headed guys, fellows with scars all over them, fellows wearing hearing aids. One chap with a carcinoma of the tongue who had recently been operated on at Mayo's. In spite of yourself, you wonder if you look as bad as all these other guys do. Maybe these are the ones Truman meant when he spoke of the great number of physically unfit in this country. In any case, my hat's off to the tailors who can make fairly respectable looking people out of us middle-agers.

I think that the psychiatric examination was worth a comment. We stood in line in our birthday suits for a period of one-half hour waiting to see the psychiatrist. I didn't quite see the need of that particular attire, but I am not up on my psychiatry. It would have been more fair if the psychiatrist had been naked, too. Apparently, we all passed after we had answered satisfactorily the question of how we liked the Army. That one question constituted the interview. I believe that there were several acceptable answers to that question because we all passed. We were then allowed to put on our pants and groped our way up to the attic for our EKG. They had a little trouble with one unreasonable chap who had had a recent coronary and didn't care about climbing the stairs. They probably gave him an O.K. without the EKG. They were considerate about things like that. They paid one fellow's way clear over to Detroit twice to have rechecks on his chest x-rays. Of course, he had complete x-rays here for many years and had to give up a day's practice, but they couldn't take a chance on local x-ray reports.—President's Page, *Muskegon County Medical Bulletin,* November, 1952.

UNITED STATES STOCKOWNERS

About 6,500,000 individuals own publicly held stocks in this country, the Brookings Institution said today.

In a study entitled, "Share Ownership in the United States," the institution reported that the vast majority of the shareowners, or 76 per cent, earned less than $10,000 a year after taxes. The survey also showed:

More men than women were stockholders

Most persons bought stocks to make a profit

Persons in the 50-59 age group owned more stocks than other age groups

Share ownership was highest among administrative executives and college graduates

The study said that one out of every sixteen persons in the adult population owned shares in at least one stock issue, and that there were one or more share owners in every tenth family. The 6,500,000 stockholders are members of 4,750,000 family units.

There are 30,300,000 "shareholdings" in stock issues traded on organized stock exchanges and over-the-counter. Every individual holding counts as one shareholding. If a person owns shares in five stocks he has five shareholdings, therefore the number of shareholders is far less than the total of shareholdings. The number of shares in 16,655 stock issues classified as public-held is estimated at nearly 5,000,000,000.—*New York Times,* July 1, 1952.

SLOAN SEES END OF BIG FORTUNES

Board Chairman Alfred P. Sloan, Jr., of General Motors, says philanthropic foundations in the future will have to be financed by business or government.

Private individuals can't do the job that Henry Ford, John D. Rockefeller, Andrew Carnegie and others once did, Sloan said, because high taxes and living costs make it impossible for them to "amass great fortunes." Sloan, testifying before a house committee trying to determine whether any tax-exempt foundations have supported subversive activities, said his own case shows the great fortunes are gone forever.

He set up the $30,000,000 Sloan foundation in 1934, he said, but "I pay an 88 per cent income

(Continued on Page 158)

Meat...

and the Therapeutic Value of Adequate Protein

Much evidence can be cited in favor of a high protein intake after surgery, trauma, infection, or burns. In supporting the many anabolic and defense mechanisms of the organism in physiologic stress,[1] high-quality protein—such as that of meat—assumes the status of an important therapeutic agent.[2]

Phagocytic activity,[3] formation of antibodies,[4] and rapid healing of wounds[5] are favorably affected by ample protein nutrition. Remission of peptic ulcer,[6] improved resistance to infectious disease,[4] and maintenance of plasma proteins after surgery[7] are other therapeutic effects attributed to an ample protein intake. In the management of ulcerative colitis, protein represents a primary need.[8] Recent advances in the treatment of extensive burns and of hepatic disease emphasize the value of high protein feedings.[9]

These experimental and clinical findings establish the therapeutic value of high protein intake.[10] To assure therapeutic protein adequacy, the dietary should provide a liberal margin of protein over normal requirements.

Meat is an important source of high-quality protein, containing essential as well as nonessential amino acids. In addition, it supplies significant amounts of B group vitamins and of iron, phosphorus, and other needed minerals.

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American Meat Institute
Main Office, Chicago...Members Throughout the United States

SLOAN SEES END OF BIG FORTUNES

(Continued from Page 156)

tax now. I don't have enough left to invest in a foundation."

Asked if he knew of any foundation financing attempts to "weaken or undermine" the free enterprise system, Sloan said, "I have no reservation in saying they serve to strengthen the economic system."

"There may be something of the other kind present," he said, "but by and large they have tended to strengthen the American system."

Sloan said he hopes business, rather than industry, will take over the financing of philanthropic foundations because "government can never perform a business activity of this kind as well as an individual. A foundation financed by private funds can exercise more imagination and initiative."—United Press release. Dec. 12, 1952.

"A HEALTHY DEATH"

In a recent issue of the *Floyd* (Va.) *Press,* our attention was attracted by the above caption in the editorial column. The subject matter is so apropos and so well expressed that we quote the entire editorial:

"Two or three years ago, it will be recalled, federal compulsory health insurance was a red hot issue. The whole weight of administration pressure was thrown behind it, regiments of propagandists in interested government bureaus were grinding out reams of encomiums in its behalf, and there seemed to be a fair chance that Congress would pass the proposed bill or some modified version thereof.

"Today, this cure-all scheme isn't exactly dead, but it is certainly moribund. Administration spokesmen have pretty well run out of wind so far as it is concerned. The Republican Party has adopted a campaign plank strongly condemning it and the Democratic Party's plank ignores it. Neither of the candidates has shown any taste for it.

"That's one healthy death for the nation."

We trust Brother Hallman is correct in his estimate of the situation, but we would like to see each candidate for the presidency speak out frankly against this socialistic proposal. At any rate, we agree that the death of this issue would really be a healthy death for the nation.—Editorial, *The West Virginia Medical Journal,* November, 1952.

SPEAKING OF TAXES

The report of the American Medical Association's "Special Committee on Federal Medical Services" could not have come at a more opportune time. Millions of Americans are looking forward to reductions in federal expenditures—and federal taxes—as a result of the recent Republican victory. In Washington, Mr. Eisenhower's chosen experts are examining budget figures in an effort to determine where savings can be made.

It seems providential, therefore, that the AMA special committee has just now completed its year-long study which, if approved and adopted, could save hundreds of millions of dollars annually in Veterans Administration medical costs.

Most of us think of VA hospitals, such as the huge, new hospital in Denver, as institutions for the care of veterans who are ill or disabled because of diseases or injuries suffered as a result of their military service.

The AMA committee notes that the American people are almost unanimously in favor of free federal hospital and medical care for such veterans. However, the committee discovered that in 1951, 432,995 patients. 84.6 per cent of all patients discharged from VA hospitals that year, were not veterans of that kind.

Instead, they were veterans who were in VA hospitals because of diseases or injuries incurred after they had returned to civilian life. In other words, the VA hospital and medical service which is now costing taxpayers about $600 million a year is not being conducted primarily to take care of war "victims."

The AMA committee does not believe that a civilian whose leg is broken in an automobile accident is entitled to have it fixed at federal expense merely because he was a GI at some time in the past.

With the AMA committee view, most Americans will heartily agree, we believe.

Theoretically, veterans who receive free treatment for illnesses and disabilities not connected with their war service are supposed to be men or women who are "needy."

The nonservice-connected patients sign statements that they are unable to pay for the care they are seeking free from the VA. Actually, everyone admits the statements of need are meaningless. The VA has taken the position that it cannot question the need of a patient if he is willing to sign the statement.

In bona fide cases of need, cities and counties are prepared to furnish free hospitalization and medical care. It is impossible to escape the conclusion that free care by the VA for veterans with nonservice-connected illnesses has become a nationwide racket.

The AMA committee would continue free VA care in the case of service-connected disease and disability. It also would continue free VA care for nonservice-connected veterans who are in real need if those veterans are suffering from tuberculosis or psychiatric or neurological disorders.

Beyond that the AMA committee would not go. It warns that already there are approximately 20 million veterans in the country and that the number is increasing by about one million a year.

No time should be lost in cutting down the free patient load of the VA and in ending a scandalous expense that taxpayers cannot afford.—*The Denver Post.*

EDITOR'S NOTE: Two days after this appeared, Admiral Boon was given the floor of the House and talked the representatives into a delaying, washed-out stand.

SELF-DISCIPLINE

In medicine, we are banded together primarily for wider and fuller dissemination of scientific information that we may better serve our fellow men. We are self-disciplined by a code of ethics and professional behavior more stringent than is subscribed to by any other group in modern society. We are disciplined further by years of training in attitudes of inquiry and examination of facts which will ever be the safeguards of scientific progress. We are more critical of ourselves than those who would destroy us can ever be in their efforts to discredit us—and all to the end that each physician as an individual may grow in knowledge and professional stature and thus improve the quality of medical care which he can render.—William A. Liggett, M.D., in *Rocky Mountain Medical Journal,* December, 1952

GOVERNMENT BY TREATY

The Constitution of the United States, in one sense, provides for its own destruction. Article VI, paragraph 2, is as follows:

"This Constitution, and the laws of the United States which shall be made in pursuance thereof; and ALL TREATIES MADE, OR WHICH SHALL BE MADE (capitalization ours) under the authority of the United States, shall be the supreme law of the land; and the judges in every State shall be bound thereby, anything in the Constitution or laws of any State to the contrary notwithstanding."

When a treaty passes from the executive branch of the government to the Senate there is little fanfare unless it be of such general public interest that it has been discussed at some length in the press. The Senate may ratify a treaty by a two-thirds vote of members present and voting, providing only that a quorum be present. One can easily discern from this the ease with which constitutional changes can be made. These changes may not follow the original intent of the men who framed our Constitution, yet they become the supreme law of the United States and of each and every state.

The United States is one of the nations which ratified the United Nations charter, thus making it a part of international law. The United Nations has ramifications about which the average citizen knows nothing. For instance, the International Labor Organization is an integral part of the UN. Reference to an editorial in the September issue of the Journal will show how the latest "convention" (treaty) framed by this organization can result in the ultimate in socialized medicine providing only that our Senate ratifies this convention. It has been said on good authority that approximately twenty of these apparently(!) minor treaties are awaiting our next congress. The ILO "convention" is probably amongst them. One might assume that certain elements of our population have selected this method of gradual and piecemeal destruction of our Constitution.

When a bill comes before Congress by the usual method it becomes a matter of public knowledge. Physicians, lawyers, and Mr. Average Citizen may easily ascertain what such a law holds in store in relation to his life and work. The citizen has a good chance of preventing legislation that he believes detrimental to him or the people at large. It is not so in the case of the treaties such as we are discussing. Here we must depend upon the watchfulness and integrity of our friends in the Senate.

The writer has a letter from the Italian Ambassador addressed to the Bureau of Examining Boards of Nebraska under date of October 29, 1952. It shows one sorry result of the "Treaty of Friendship, Commerce and Navigation" between the United States and Italy, signed in February, 1948. Unfortunately space prevents quoting the whole letter but we shall try to summarize the important points.

The letter points out that the treaty established that "the nationals of either High Contracting Party be permitted to exercise commercial, manufacturing, processing, financial, scientific, educational, religious, philanthropic and professional activities, except the practice of law."

When the Italian Embassy asked the Department of State for its interpretation in relation to the practice of medicine and dentistry, the following opinion was given: "The treaty provisions would require the States, each according to its own procedure, to admit Italian nationals to the practice of medicine on terms as favorable as those on which each admits its own citizens . . . Such treaty rights would be enforcible by Italian nations in the State and Federal courts of justice. State laws or regulations forbidding aliens to practice medicine, or providing conditions more burdensome than for the State's own citizens, would be inoperative with respect to Italian nationals . . ."

The letter ends with a polite request that the following questions be answered:

"1. Aside from the question of the recognition of academic titles, are there in your State laws or regulations forbidding foreigners to practice medicine or dentistry?

"2. If so, WHAT STEPS HAVE BEEN TAKEN TO RENDER INOPERATIVE SUCH LAWS AND REGULATIONS with respect to Italian nationals? (caps ours).

"3. What procedure should an Italian citizen follow to obtain recognition in your State of the specific treaty rights which put him in the same position of a national of the United States in regard to the condition of citizenship, when applying for the exercise of medicine or dentistry?"

This treaty clearly demonstrates the effect upon our Constitution and upon the rights of the State which may result from GOVERNMENT BY TREATY. A constitutional amendment will be

introduced in the next Congress to prevent such legislation by treaty. Every physician should support this amendment in every possible way. Such an amendment may take several years for ratification. In the interim, we should each urge his Senator to be ever watchful in preventing the ratification of treaties which tend to destroy our Constitution and to ignore the rights of the State. —Editorial, *Nebraska S.M.J.,* December, 1952.

"HOW SICK IS SOCIALIZED MEDICINE?"

It has been aptly said that "our fight is against the malignancy of Socialism, not merely socialized medicine," if the free world is to survive. Since malignancy is defined not alone as the quality of being malignant, virulent or life-threatening but also as a tendency to increase in virulence, certainly socialized medicine in practice offers a timely example of socialism's progressively virulent nature. What impartial observer can gainsay that it is truly malignant in that it tends to go from bad to worse?

A recent survey of Britain's national health scheme by Melchoir Palyi, noted economist, reveals its result as the depressing opposite of its glowing promises. Less than three years after the program became law in Britain, 553,577 persons were on the waiting list for hospital beds. Many of the mentally deficient and the helpless aged have been deprived of institutional care and are left to shift for themselves. In four years, the costs of governmentalized medicine have almost trebled, mounting to more than 10 per cent of the overinflated national budget.

The something-for-nothing Utopia, advertised worldwide, is now in slow retreat. Socialism or no socialism, the people are finding that they actually pay for what they get "free." "First class" treatment is open primarily to those who can afford to pay. It seems astounding from the sheer physical feat involved, let alone the professional aspects, that fewer than 20,000 general practitioners carry the main burden of medical care for more than 45,000,000 people. In industrial medicine there is no progress at all.

"How Sick Is Socialized Medicine?" This title of Mr. Palyi's excellent magazine article† is a timely question worthy of careful consideration. Physicians and laity alike need to be well informed on the subject. Britain's health program offers a notable example of the malignancy of socialism and affords an excellent illustration of the pitfalls which await this country if it continues its disastrous socialistic trend.—Editorial, *Journal Florida Medical Association,* December, 1952.

† Palyi, M.: How Sick Is Socialized Medicine? The Freeman (June 16) 1952. Reprints at $7 a hundred or $60 a thousand may be obtained from The Freeman, Dept. PB, 240 Madison Ave., New York 16, N. Y.

AMA REVISES THE ESSENTIALS OF AN APPROVED INTERNSHIP

(Continued from Page 152)

creased to 5,000, exclusive of the newborn, and the autopsy rate increased to 25 per cent.

Under these revisions the Council will approve rotating and mixed internships and straight internships in these specialties—internal medicine, pediatrics and surgery. Straight internships in pathology and obstetrics-gynecology will no longer be approved.

The revised "Essentials" became effective January 1, for new approvals. The autopsy rate of 25 per cent became effective for all hospitals January 1.

AMEF '52 FUNDS TOTAL MORE THAN $886,430

Contributions to the American Medical Education Foundation in 1952 totaled more than $886,430. This includes an American Medical Association grant of $500,000 voted by the House of Delegates in December, 1951, at Los Angeles. In all 6,739 contributions have been recorded from 6,697 individuals, eleven laymen and thirty-one organizations.

Distribution of Class A grants for the seventy-nine medical schools in the country was made in August . . . $15,000 for each of the seventy-two four-year schools; $7,500 for each of the six two-year schools, and $11,250 for one three-year school.

Particularly encouraging . . . contributors up 4,863 over 1951 . . . total receipts up $140,513 over 1951.

POINT IV AGENCY SEEKING PUBLIC HEALTH PHYSICIANS FOR TWELVE COUNTRIES

Because of stepped up Point IV operations, the Technical Co-operation Administration says it urgently needs twenty-four public health physicians for assignments in Burma, Iran, Jordan, Saudi Arabia, Bolivia, Chile, Colombia, Costa Rica, Ecuador, Honduras, Nicaragua and Panama. Twenty-nine U. S. physicians are now working on TCA health and sanitation projects in more than thirty countries.

An agency spokesman said posts of deputy chief, health and sanitation staff, are available in Burma, Jordan and Saudi Arabia, and seven chiefs of regional offices are open in Iran. Salaries range from $10,000 to $15,000 a year, including allowances.

Dr. H. van Zile Hyde, director of health and sanitation staff for TCA, left Washington recently for Geneva where he was to be joined by a World Health Organization representative. The two will tour Near East countries in an effort to bring about better co-ordination between WHO and TCA health programs.

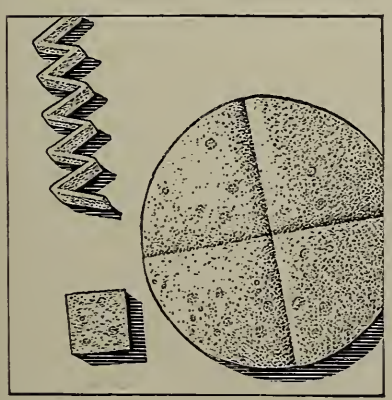
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MEDICAL EDUCATION FOR DEFENSE PROGRAM TO BE CONTINUED IN 1953-54

The Medical Education for National Defense (MEND) program will continue during the 1953-54 academic year on a broadened scale in selected medical schools, Colonel Floyd L. Wergeland, MC, Chief of the Education and Training Division in the Office of the Army Surgeon General, reported. Colonel Wergeland spoke before a combined meeting of Philadelphia area Medical Reserve units.

Five medical schools are conducting the program during the current academic year on an experimental basis in co-operation with the Defense Department and other Federal agencies. Colonel Wergeland said both the faculty and students of participating schools had co-operated enthusiastically in the effort to incorporate military and civil defense aspects of medical subjects into the regular curricula of these institutions.

The schools selected by the Association of American Medical Colleges for the pilot study were the University of California, the University of Illinois, the University of Buffalo, Cornell University and Vanderbilt University. Other colleges of medicine will be added to the list as the success of the initial experiment is fully established and norms for the operation of the plan are worked out.

The MEND program provides that subjects related to military medicine and disaster relief be introduced into as many first-year medical courses as possible.

The program had its beginning on June 24, 1950, when the Committee on Preparedness for War, meeting in Chicago with the Executive Council of the Association of American Medical Colleges, appointed a joint Committee on Medical Education in Time of National Emergency.

The joint committee is composed of representatives of the Association of American Medical Colleges, the Council on Medical Education and Hospitals of the AMA and representatives of Federal medical services.

The committee concluded that the Medical ROTC program was not a suitable vehicle for the required curriculum changes. It declared a new type program should be adopted after studies had been made in several medical schools. Thus the present pilot studies in the five universities came into being.

It was agreed that the primary emphasis in the program should be on areas of fundamental importance to military medicine and civil defense. The plan included orientation of medical faculties in these areas.

Defense Department permission was obtained to substitute the new program for that prescribed by ROTC for first-year medical and dental students during the academic year 1952-53.

One anticipated result of the program is an increased sense of civic responsibility on the part of medical school graduates according to Colonel Wergeland.

ARMY INVESTIGATES SOCIAL RELATIONSHIPS IN COMBAT

Group relationships which reduce psychological stress, combat fatigue, and neuropsychiatric breakdowns of American soldiers are being studied in Korea by the Army Medical Service.

Under the title of "A Study of Social Strengths in Combat Units" the relationships of the combat soldier to his social situation, social structure, and culture are being investigated. The project, already under way, is under the joint sponsorship of the Neuropsychiatry Division of the Army Medcal Service Graduate School, and Michigan State College.

The three-months on-the-spot study of the formal and informal social system of a rifle company in combat is being made by Capt. Roger W. Little, MSC, a World War II Infantry veteran of the European-African-Mediterranean campaigns. He received the Bronze Star for valor, and a Purple Heart for wounds received in action.

Captain Little received his A.B. degree in Sociology at Harvard in 1948, and his Master's degree in Social Casework at the University of Chicago in 1949.

MEDICAL ECONOMICS

Oranges, grapefruit, peas, olives, walnuts and tumors are of various size. In the interest of precise verbal description, therefore, it would seem to be a good suggestion that physicians familiarize themselves with the language of green-grocers in order that they may state the size of a tumor with an exactness becoming to fellows of science.

The less than precious description, "the size of a grapefruit," then would give way to the eminently more precise "the size of a two-for-a-quarter grapefruit." Thenceforth, readers of medical literature who kept themselves reasonably well informed upon conditions in the citrus fruit market would have little difficulty in determining an author's meaning. To them, it would be but child's play to calculate that, at today's prices, the tumor was, to put it in their own simple words, 10 cm. in diameter.

Since rising commodity prices must, in this order of things, make two-for-a-quarter tumors smaller and smaller, it is conceivable in the newer economic thinking of our day that tumors might somehow be inflated out of existence.—*California Medicine.*

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The Doctor William Beaumont Memorial on Mackinac Island

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Chairman, MSMS Beaumont Memorial Restoration Committee

Detroit

THE William Beaumont story is long familiar not only to doctors, but to school children. It is the story of a young surgeon's mate stationed in a wilderness outpost who took advantage of an accident and made one of the greatest contributions to scientific medicine; a discovery which resulted in great benefit to all mankind.

Through an accidental injury to a French Canadian Voyageur, Dr. Beaumont was able to study the interior of a human stomach, and, by a carefully observed series of experiments, to establish knowledge of the digestive processes of the gastrointestinal tract.

In large medical centers, where clinical and laboratory facilities were available, history records other cases of gastric fistula, but the knowledge of digestion continued theoretical, being attributed to the warmth of the body and resulting putrefaction, fermentation, and the mechanical (maceration) action of the stomach wall.

Dr. Beaumont, the pioneer physiologist of the United States and the first to make a contribution of enduring value, settled finally the chemical nature of the digestive process so much discussed from the days of the fundamental experiments of Reaumur* (1752) and Spallanzani** (1782). In the absence of any facilities and working entirely alone, Dr. Beaumont's scientific methods were excellent.

Medicine prior to Beaumont had recorded few who were able to observe accurately their findings. Theophrastus Bombastus von Hohenheim (Paracelsus)† and later Vesalius,‡ had this ability and established the true scientific methods of research, but on this continent it was not until June 6, 1822, that destiny let fall in the path of this young medical officer the opportunity which he recognized, grasped, and improved with a zeal and unselfishness not exceeded in the annals of medical science.

William Beaumont, fourth in descent from William Beaumont who came to America from England about 1635, and settled in Saybrook, Connecticut, was born at Lebanon, Connecticut, on November 21, 1785. He received the usual public school education and by the turn of the century he was fifteen, at a time when John Adams had just completed his administration. Thomas Jefferson had succeeded to the presidency. His administration was ushered in with evidence of the great

*Rene Antoine Ferchault de Reaumur, 1683-1757, French natural philosopher and inventor of the Thermometer.

**Lazaro Spallanzani, 1729-1799, Italian anatomist.

†Theophrastus Bombastus von Hohenheim, 1493-1541, a Swiss alchemist and physician. He was known as Philippus Aureolus Paracelsus.

‡Andreas Vesalius, 1514-1564, Belgium anatomist in Italy.

THE COVER

The "Beaumont and St. Martin" painting by Dean Cornwell was presented by Wyeth Incorporated of Philadelphia, to the Michigan State Medical Society at its Annual Session in Detroit, September 23, 1952. The painting is now housed at 606 Townsend, the "home" of the Michigan State Medical Society. Eventually, it will be given a place of honor in the Beaumont Memorial at Mackinac Island when erected. The four color plates used on the cover of this Number of The Journal were supplied through the courtesy of Wyeth Incorporated.

progress that the country was making. Jefferson's second administration witnessed the beginning of the aggression of England's navy on American commerce, and the seeds of the War of 1812, in which Beaumont was to take an important part, had already been sown.

Prompted by a feeling of restless ambition, which was to characterize his future life, Beaumont left his father's home in 1806. Traveling with a horse and cutter, a barrel of cider, and $100, he arrived in the spring of 1807 at the little village of Champlain, New York, which was only a few miles from the Canadian Border. Having been trained in one of the best of the New England public schools, he asked of the trustees a position as teacher, was accepted, and continued successfully in this capacity for three years.

While going north to Champlain by way of Western Vermont, Beaumont came in contact with Dr. John Pomeroy, a prominent physician and surgeon in Burlington, from whom he borrowed such books as would give him the fundamentals of medicine. While teaching school and tending store in Champlain he found time to read these medical works, using his years of teaching to accumulate sufficient money to keep him through the prescribed two years of medical apprenticeship.

In the fall of 1810, he crossed Lake Champlain to St. Albans, Vermont, where Dr. Benjamin Chandler was a capable practitioner. Dr. Chandler accepted young Beaumont, taking him into his home as an apprentice, and came to exert an excellent influence on the mind of his assistant, emphasizing the importance of a good memory, and of developing his power of observation and the habit of logical thought.

On June 2, 1812, Beaumont was granted a license to practice, his diploma being signed by the Dr. Pomeroy who had earlier loaned him medical books. After being granted his license to practice, he remained with his preceptor until September 8. War having been declared with Great Britain, he left Vermont for Plattsburg, New York, where on September 13, 1812, he was received into the army as surgeon's mate and assigned to the Sixth Infantry Regiment on brevet from General James Bloomfield. His commission was issued by President James Madison in December, 1812.

Dr. Beaumont experienced a very active participation in numerous engagements, recording many cases which are of interest to the military surgeon and the surgeon of trauma.

The treaty of Ghent was signed in December, 1814, and ratified in February, 1815, putting an end to hostilities. A few months later, Dr. Beaumont tendered his resignation and entered practice in Plattsburg, where he had many friends and a deserved reputation. Practicing until 1819 his work was characterized by careful observation and records.

Active service in the medical corps having become more attractive in the meantime, Dr. Beaumont on March 18, 1820, was commissioned post surgeon of the United States Army by President James Monroe, to take rank from December 4, 1819. He was immediately ordered to Fort Mackinac on the northern frontier, where he was to report to General Alexander Macomb under whom he had served valiantly in the battle of Plattsburg.

Mackinac had become the center of a series of trading posts established in a large territory including the shores of Lake Michigan, Lake Huron, Lake Superior, and the Mississippi country. In the fall brigades of several bateaux, each manned by a clerk and five to eight voyageurs, started for their distant stations. The voyageurs, like the *coureurs des bois,* formed a sort of fraternity which had gradually developed through the demands of the fur trade. They were French Canadian, sprung from the habitant class, but differed in that they were of a roving disposition, at home only on the water. About three thousand of these lighthearted fellows were in the employ of the American Fur Company.

Early in June, 1822, Indians and voyageurs were returning to Mackinac with the results of their winter efforts. The little village had awakened from its long sleep, and the beach was again crowded with tents and wigwams and a seething mass of strange humanity. Many of the returning voyageurs crowded into the retail store of the American Fur Company in order to buy buckskin coats, moccasins, flannel shirts, and gaudy neck bands.

It was in this little throng that a tragedy occurred on June 6, 1822. This was to leave its imprint on the pages of medical history for all time to come. As described by Jesse S. Myer,[1] the biographer of Beaumont, a gun was accidentally

discharged and Alexis St. Martin, a young voyageur, dropped to the floor with a cavity in the left upper abdomen that would have admitted a man's fist. He proved to be a young French Canadian about nineteen years of age who had recently come down from Montreal.

Gurdon S. Hubbard was an eye witness of the accident and the only one who was careful enough to leave any statement concerning the affair. He reported as follows:

"The late Major John H. Kinzie had charge of the American Fur Company's retail store at Michilimackinac. I was in the habit of assisting him occasionally when a press of customers needed extra clerks. The store comprised the ground floor near the foot of Fort Hill, on the corner of the street and the road leading up to the fort. The rear part of the store was underground, built of stone, which is still standing. This St. Martin was at the time one of the American Fur Company's engagees, who, with quite a number of others, was in the store. One of the party was holding a shotgun (not a musket), which was accidentally discharged, the whole charge entering St. Martin's body. The muzzle was not over three feet from him—I think not over two. The wadding entered, as well as pieces of his clothing; his shirt took fire; he fell, as we supposed, dead.

"Dr. Beaumont, the surgeon of the fort, was immediately sent for, and reached the wounded man within a very short time—probably three minutes. We had just got him on a cot and were taking off some of his clothing.

"After Dr. Beaumont had extracted part of the shot, pieces of clothing, and dressed his wound carefully, Robert Stewart and others assisting, he left him, remarking, 'The man can't live thirty-six hours; I will come to see him by and by.' In two or three hours he visited him again, expressing surprise at finding him doing better than he anticipated. The next day, I think, he resolved on a course of treatment, and brought down his instruments, getting out more shot and clothing, cutting off ragged ends of the wound, and made frequent visits, seeming very much interested, informing Mr. Stewart in my presence that he thought he could save him.

"As soon as the man could be moved he was taken to the fort hospital, where Dr. Beaumont could give him better attention. About this time, if I am not greatly mistaken, the doctor announced that he was treating his patient with a view of experimenting on his stomach, being satisfied of his recovery. You know the result.

"I knew Dr. Beaumont very well. The experiment of introducing food into the stomach through the orifice, purposely kept open and healed with that object, was conceived by the doctor very soon after the first examination."

Dr. Beaumont has also left an account of the examination of St. Martin and his subsequent care in the fort hospital. Although every effort was made to close the opening in the stomach, the aperture persisted. During the ensuing two years the series of experiments previously alluded to were carefully planned and carried out, providing observations and material which was sent to chemists and other clinical workers as far away as Edinburgh.

In the fall of 1824 Beaumont sent a complete report of Alexis St. Martin's case to Surgeon-General Joseph Lovell for his approval and correction with the suggestion it be published in some reputable medical journal. The article appeared in the *Medical Recorder* early in 1825, but through an oversight on the part of someone, it was published as "A Case of Wounded Stomach," by Joseph Lovell, Surgeon-General, U.S.A. The mistake was corrected, however, and credit was given to Beaumont. In 1833 the experiments were published in detail.

Several papers giving the story of Beaumont and Alexis St. Martin appeared over the years but it was not until 1912 that a full history was published when Dr. Jesse S. Myer produced his *Life and Letters of Dr. Wm. Beaumont*. Dr. Myer had been given the contents of two old chests by the daughter of Dr. Beaumont, Mrs. Sarah Beaumont Keim, who lived in St. Louis where her father practiced during the last twenty years of his life. The chests contained documents, manuscripts, memoranda, diaries, letters, clippings, and books. From Dr. Myer's biography of Beaumont much of this account has been obtained.

Several centers of Beaumont interest have been developed in this country. The chief of these will be the old retail store of the American Fur Company of Mackinac Island when its restoration is completed. The store is to be recreated from the lower part of the building, which still stands. The working drawings are completed, and the property purchased by the Michigan State Medical Society. When the building is restored during the summer of 1953, it will be given to the Mackinac Island State Park Commission to be preserved by the state of Michigan as the country's most significant medical shrine.

For the medical men of the future and for the people of the North American continent, there will thus be preserved the memory of the surgeon who discovered the nature of gastric digestion by

his keen powers of observation. This contribution of Dr. Beaumont has been of benefit to all mankind. He, by his skillful treatment, helped in the recovery of a seriously injured person, and thus was enabled to perform a carefully recorded series of experiments which are all the more remarkable because they were performed in an isolated army post without the aid of special facilities or previous training in research.

Reference

1. Myer, Jesse S.: Life and Letters of Dr. William Beaumont. St. Louis: C. V. Mosby Company, 1912.



"Beaumont Beck"

Editor's Note: The above photographic study of Otto O. Beck, M.D., Birmingham, Past President of the Michigan State Medical Society and Chairman of the Beaumont Memorial Restoration Fund, was made by Constantine L. Oden, M.D., of Muskegon, Michigan, an old friend. Dr. Oden takes his excellent photographs with a Rolleiflex, using a Strobe light at 3000th of a second. This produces a normal negative from which he may make a normal print; however, to use Dr. Oden's words, "The fun comes in the processing of the prints—by manipulation under the enlarger where it is possible to make any kind of a distortion desired; it works on the same principle as the mirrors—horizontal, vertical, or any kind of distortion can be obtained by printing, holding the paper at different angles, tilting the enlarger and so on."

If MSMS members desire to see additional "studies" of MSMS Officers as fun processed by Dr. Oden, they will be featured in JMSMS from time to time.

To Build a Medical Shrine—Our Privilege

By Otto O. Beck, M.D., Birmingham
Chairman, MSMS Beaumont Memorial Restoration Fund

THE House of Delegates and The Council of the Michigan State Medical Society wisely decided that the restoration of the American Fur Company store on Mackinac Island should be accomplished through the voluntary contributions of Doctors of Medicine of Michigan. This assures a wider interest in the project, for where many have contributed a small sum a personal interest is developed which otherwise cannot be obtained. The ideal would be for every Doctor in Michigan to own one stone or a piece of wood of the building.

At the present writing it is estimated that nearly sufficient funds have been obtained to restore the building. Additional money will be required to furnish the store and to purchase relics of Doctor Beaumont and merchandise of that period.

The plan now is to demolish the old building, except that portion of the original which can be used. The restoration is to begin this spring as soon as weather permits. The building will be divided into two rooms. The larger room will be used as a museum containing writings, paintings, et cetera, of Doctor Beaumont. The smaller room will be set up as a retail store exhibiting the type of merchandise sold in a frontier store in the early nineteenth century.

This project has already created considerable interest in the minds of the public. Last summer many people visited the site, for they had heard from various sources such as radio, television, newspaper and magazine articles of the interesting project planned by the medical doctors of Michigan.

This project is what might be termed a "natural" for it has everything necessary to create universal interest. Geographically it is situated in the center of most of the important activities of the early Northwest Territory. It is on a beautiful State Park which is visited by many thousands of people every year. There Alexis St. Martin on June 6, 1822, was accidentally shot but fortunately recovered from what was considered a

fatal wound. He became a medical curiosity, a man with a hole in his stomach. This in itself has an attraction for everyone. Then on top of it all, Doctor Beaumont used the man with the gastric fistula for his observations on the functions of the stomach. Destiny brought these two together.

X-ray and all other scientific aids developed since 1822 have revealed little more about the action of the stomach than Doctor Beaumont learned without a laboratory. His laboratory apparatus consisted only of a thermometer, test tubes, and a sand bath, using his own time and money, working at remote frontier army posts between bloody Indian wars and cholera epidemics. His story is one of the great sagas of American medical history. His discoveries placed the study of nutrition on a foundation of proven facts.

For this experience fate made a curious choice. The Connecticut farm boy, William Beaumont, never attended medical school. He apprenticed himself to a physician, after the manner of the time, eventually receiving a medical certificate. He had no chemistry, little physiology and no knowledge of research techniques. He had tended the wounded in battle and had done some private practice. Though ill trained, Beaumont was a brilliant experimenter, indefatigable in pursuit of fact. He fed Alexis through the mouth and through the hole in his stomach. He studied the digestion of almost every kind of food, cooked, uncooked, whole, chopped, seasoned, and unseasoned. Alexis grew surly and Beaumont observed the effect of emotion on digestion. Alexis often overindulged in alcoholic drinks and the doctor checked the reactions.

Doctor Beaumont became the pioneer physiologist of the United States and the first to make a contribution of enduring value. He ranks with the medical greats of the world.

The highest praise that we can give is to say that Doctor Beaumont's life fulfilled the ideal with which he set out, and which he so well expressed in this sentence: "Truth, like beauty, is when unadorned, adorned the most, and in prosecuting these experiments and inquiries, I believe I have been guided by its light."

The Beaumont Memorial will be a beacon to remind the public that medical progress is rooted in the history of this state. Michigan Doctors of Medicine are privileged to honor this heritage. Let us make the most of this opportunity and in doing so we will honor our medical profession, the people of Michigan, the State of Michigan, and give the Beaumont Memorial the place it deserves among the medical shrines of the world.

When it is completed this shrine to a great medical man will be presented as a gift to the people of Michigan from their Michigan Doctors of Medicine.



Model of Beaumont Memorial Restoration

Financing the Beaumont Memorial

By W. S. Jones, M.D.
Chairman MSMS Finance Committee and of Beaumont Memorial Working Committee
Menominee, Michigan

EVERY financial report is historical, in a sense. In presenting the financial side of the Beaumont Memorial Restoration, therefore, we must present a few facts of history.

Some ten years ago, the Chairman of the Mackinac Island State Park Commission, W. F. Doyle, was invited to attend the MSMS Annual Session in Detroit. There he met C. E. Dutchess, M.D., then Medical Director of Parke, Davis & Co., Detroit. They discussed a subject of mutual interest—the restoration of the old "Earley House" on Mackinac Island into a Beaumont memorial. It was in the basement of this building that Dr. William Beaumont first cared for his famous and intractable patient Alexis St. Martin. After a visit by Mr. Doyle before the Board of Directors of Parke, Davis & Co., the Board approved a $10,000 grant for the purchase of the Earley property from some nineteen heirs scattered throughout the United States. Therefore, in any historical or financial report of the Beaumont Memorial, W. F. Doyle—who throughout the years has continued to stimulate the erection of the Beaumont Memorial—must be given full consideration and due credit.

Of the original $10,000 Parke-Davis grant, some $5,100 was used to purchase the land and make land surveys. For future expenditures, approximately $900 remains in the hands of the State's Trustees of the Beaumont Memorial: D. Hale Brake, Michigan's State Treasurer; Joseph H. Thompson, of Kalamazoo, former member of the State Park Commission; and Mr. Doyle.

Of the monies granted by Parke, Davis & Co. $4,000 is held by The Council of the Michigan State Medical Society.

From 1,722 Contributors $22,428.90

During the MSMS Presidency of Otto O. Beck, M.D., of Birmingham, the Beaumont Memorial Restoration became his main project. With the approval of the House of Delegates and of The Council of the Michigan State Medical Society, President Beck began a vigorous campaign for funds to build a monument on Mackinac Island to Dr. Beaumont and to the medical profession of this State. By personal contacts and a series of individualized letters, President Beck contacted all members of the Michigan State Medical Society with the following slogan:

"A little from many will build the Beaumont Memorial—a monument to the generosity of Michigan's Medical men."

Throughout the twelve months of Dr. Beck's term of office, 1,722 Michigan doctors of medicine contributed $22,428.90—mostly in small amounts. The average contribution has been $11.63.

This $22,428.90, added to the $4,000 retained by MSMS from the original grant received from Parke, Davis & Co., totals $26,428.90. (As of 12/31/52.)

Bonds and Cash

The $26,428.90 has been invested, in part, in bonds, with $6,308.10 being held in cash. The purchase price of the bonds was $20,120.80.

The cash on hand will adequately cover any obligations assumed in the early months of 1953, when work on the Beaumont Memorial will start. The bonds (short term United States Treasury Notes) will mature in sufficient time for any necessary use in completing construction of the Memorial on Mackinac Island.

A Total of $40,000 Needed

An additional sum of approximately $13,500 is needed to insure the erection of a permanent Beaumont Memorial. Past President Beck and the members of The Council of the Michigan State Medical Society hope that at least 60 per cent of the members of every component county society will have contributed prior to April 1, 1953. The members in some county societies have contributed 100 per cent—thanks and high congratulations go to these outstanding organizations.

To build the Memorial—and to furnish it in the period of 1822—will mean that some 1,200 additional MSMS members will have to contribute the average sum of $11 or more each.

The Beaumont Memorial is the Michigan doctor's memorial—**your** memorial. Build your share of your own monument. Won't you please send your check today?

See Page 134 for list of contributors.

The Beaumont House

Its Background and Setting

By Emil Lorch, A.I.A.
Ann Arbor, Michigan

THE HISTORY of Mackinac Island, successively under three flags, is reflected in its buildings and their sites.

The site of what is to be known as the Beaumont house was part of a land grant by Lt. Gov. Patt Sinclair to a British officer. The plot of land then went by purchase to a French trader from Green Bay. In 1796 the entire plot was acquired by John Ogilvie, of Montreal, which was then a center of Canadian trade in pelts, the home of the great North West Company and of the Beaver Club for "arrived" traders.

Built before the War of 1812, the Ogilvie house witnessed the capture by the British of Mackinac Island and its return to the sovereignty of the United States. After being the outpost of Ogilvie's supply firm to the fur trade, the house became in 1818 a retail store of the American Fur Company; during its ownership by the Company in 1822 occurred the Alexis St. Martin "accident," which led to the famous experiments of Dr. William Beaumont.

After the decline of the fur trade at Mackinac there followed a long period of residential use of the building while the fish industry flourished, that industry being gradually succeeded by the tourist trade, and the house finally becoming a tourist home. By that time it was of three stories with an enclosed second story porch and had a central heating system and plumbing. Now, about forty years later, the building is to return to its early form.



Fig. 1. The house as rebuilt before 1855 with dormer windows and a look-out platform. The windows have blinds. The neat fence and terrace wall are almost intact. The ground level is lower at the house and terrace corners than in 1946. In 1855 there were no cement walks and Fort Street had apparently not been graded. The original of this picture is in the laboratory of comparative physiology at the Harvard Medical School and appears in "The Life and Letters of Dr. William Beaumont" by Dr. Jesse S. Myer. In the basement of this house Alexis St. Martin was wounded. It was then the retail store of the American Fur Company. This picture shows its appearance after 1855, the upper part of the old structure having been replaced by a new one. It stands at the foot of the hill on which is the fort, measures 25 by 40 feet, and was entered by a door behind the lattice work.

The building fronts on Market Street across from Marquette Park and at the corner of Fort Street which slopes sharply upward toward the Fort. The building is 40x25 feet and stands on a site 49x51 feet in depth, within but 2 feet of the south boundary and a total of 17 feet from the next house, on lower ground, on Market Street. The two-story house at the rear is on higher ground and farther away.

The three principal periods of use of the house can be traced in its construction with the help of the letter-books of the American Fur Company, the deeds of the property and other documents.



Fig. 2. Present view from Fort Street showing terrace without fence; part of stone wall has been removed—also outside stairs to second story enclosed porch. The slope of Fort Street also appears.

Of the first stone-walled cottage there remains the lower portion and part of the large stone fireplace. The existing stairs and partitions and the partial wooden floor are all of a later period; the stairs show little wear.

Over the stone ground story an attractive one and one-half story frame addition was built about one hundred years ago, thus making the two and one-half story house shown in "Life and Letters of Dr. William Beaumont" by Dr. Jesse S. Myer. Its heavy timber or "barn" frame can be traced between the present clapboarding and the plaster on sawed lath. The attic of this bungalow-like building had dormer windows and a roof lookout, a small front porch at second story level, and cornices with sawed, scalloped edges. The second story window spacing differs from that below and the sashes have glass panes larger than those of the first story.

There is white painted interior finish, and the inside doors have the two vertical panels and white china knobs characteristic of the period; there is a brick fireplace and hardwood upper flooring in a second story room where a fire occurred, after which the trim in that room was painted black. Here also is a dumb-waiter from the first story kitchen, one of the early gadgets of domestic architecture.

On the Fort Street side and at the present second story level is a terrace with a fine old lilac and other shrubs. The top of this terrace is above Market Street in front; in back it is at the same level as the lower part of the rear yard. The level of the latter was apparently raised when the height of the building was first increased, thus giving direct access to the rear yard from the house. On the south side, the back yard is higher than the adjoining land and has a stone retaining wall with a buttress for support.



Fig. 3. Part of small rear wing at southwest corner of the building with buttress and retaining wall for rear yard. The slope of the ground of the adjoining lot continues to Market Street where the full height of the first story is above ground level.

After 1909 when the roof, dormers, and lookout were removed and the attic walls raised, the present three-story house emerged. This top portion is of light stud construction; some of the wide roof boards, studded with shingle nails from the two and one-half story house, are used as sheathing. In the third story the interior finish is varnished pine, not mitered. For the central heating system the boiler was set against the stone fireplace and a new flue-lined chimney built in such a way as to wreck part of the old stone fireplace. Although one partition was ingeniously hung by means of an iron rod from the roof frame, alterations led to overloading the construction and the introduction of awkwardly placed posts for support in the first story. Two wooden beams end illogically in front at window openings, one of which was walled up to give support; a wooden post was used for the other beam. These first story elements are obviously not of the original construction. There is no trace of log construc-

tion. The plumbing became possible when the village acquired a water system.

When, in 1818, the American Fur Company rented "Ogilvie's dwelling" and two other buildings including a storehouse, written directions were given to make only necessary repairs; no major structural changes were apparently made until much later.



Fig. 4. Appearance of the building in 1946 and as rebuilt after 1909. Facing Market Street and south of the building is the Doherty residence. The original first story is hidden under the lengthened porch. The house at the rear is an enlargement of a small one-story cottage.

The existing first story ceiling, or second story floor construction, is what is left after several changes were made in the use of the second story space. The present ceiling construction bears no relation to the simple way in which ceiling beams were customarily arranged with the exposed beams spanning from front to rear and resting on walls between openings.

This system used in the French-Canadian "habitant" cottages was familiar to the traders, craftsmen, and other employes who so largely peopled Mackinac from French Canada. They continued to speak French, to carry on their social customs and to like picturesque, warm stone houses with high roofs and projecting eaves, shutters, and casements, hand-wrought hardware, and color.

Visitors to Mackinac during the early part of the last century describe the village as one of low buildings with the exception of the warehouses. The cottages were generally white on the outside, some with bright colored shutters. Red-brown paint seemed to be the favorite but various colors were stocked by the retail store.

The small lot of irregular shape is what was left after selling off the remainder of the British grant which had, as purchased by John Ogilvie and confirmed to him by the U. S. Land Commissioners, a Market Street frontage of 135 feet and an average depth of 150 feet. On the original plot there are now two other houses and the Episcopal Church, all of frame construction. The Doherty house to the south was built about one hundred years ago. A small log house now covered with clapboards forms part of the two-story house at the rear and may ante-date the Ogilvie house. It may be the smaller of two buildings which were on the property when purchased by Ogilvie and shown on Major Gratiot's map of 1817. This map also shows a small wing on the south side of the Ogilvie house. At that time Market Street was the important thoroughfare, Main Street having buildings on only the upper side. Fort Street rises almost the height of the first story in the depth of the house.

Lacking knowledge of Dr. Beaumont and his unique patient, early writers did not mention them

or the house where the "accident" occurred, and the public forgot it all until interest was aroused through the efforts of members of the Medical Society of Michigan.

mansion, the Agent's or Stuart house, built later by the Company as its headquarters. For a time this building was the John Jacob Astor House or hotel.

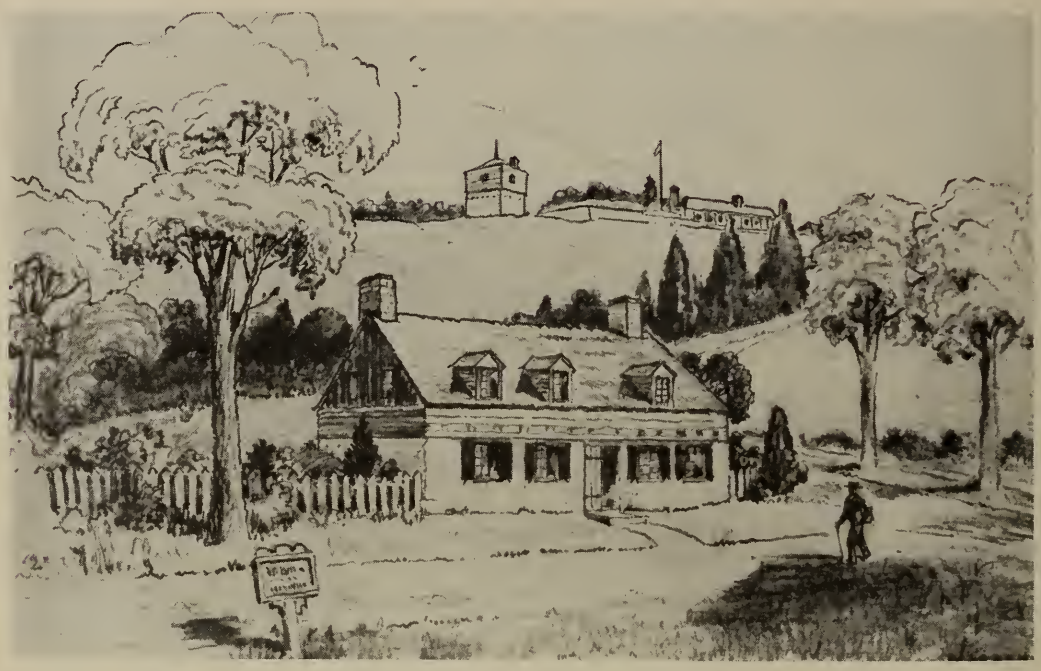


Fig. 5. The Beaumont House as it will appear when completed.

The oldest drawing in which the Ogilvie house appears, and then showing only the roof with dormer windows and look-out, was published in 1855. While we have no description of the lower portion, we do have the stone walls of the first house and some suggestive data. This is more than remained of George Washington's birthplace when a restoration was proposed. No description being found during a long search, a house was built on the foundations according to the well-established local tradition. At Mackinac the Ogilvie house was built by non-residents in the French-Canadian tradition, rather than in the local mode.

From the letter of an employe of the American Fur Company it appears that the "Ogilvie dwelling" had an "upper part," but when in 1818 a large group of the Company's "winterers" were to be sheltered only the ground story of the Ogilvie house was to be used for some of the men. Bark huts were to be built to accommodate the others, involving expense which would have been avoided if possible.

It is significant that the building was the only early private house built of stone at Mackinac; a partial exception is the high basement of the fine

The Ogilvie house was apparently of the common one and one-half story height; what remains of the original has much in common with the "habitant" cottages and was probably built by French craftsmen from Quebec Province. This general type is being followed in rebuilding the upper portion.

Enclosed by thick masonry walls, the interior measures 34x26 feet, which space is to be divided into two rooms as at present. The larger room, this having the off-center stone fireplace, is to become the Beaumont Memorial Room and is to contain the well-known painting by Dean Cornwell showing Doctor Beaumont attending Alexis St. Martin. There will also be the portrait of Dr. Beaumont by Deane Keller, and documents and objects of special interest. In the smaller, or south room, there will be exhibited the kind of material known to have been kept in stock by what was a retail store of the fur company in 1822.

After a long period of vacancy of the house, many now look forward to seeing it restored to use on a plane worthy of its important associations, and this it is hoped will be accomplished during the present year. Some also hope that in time the

environment will suggest the original setting including perhaps a stretch of Market Street.

The Market Street of the past was important both as a business and residential street. Along its upper side, near the Beaumont house, stands the impressive group of buildings, largely restored, of the American Fur Company, a monument of the fur trade and of the economic history of Michigan and the nation. Farther south is the well preserved first courthouse, a busy place before the county seat was fixed at St. Ignace. Nearby is the front part of the Edward Biddle house, a unique and precious but weakened fragment of an individual trader's home. When this and the remainder of the Astor Trading Post have been restored, the Beaumont house will be in even better company than now and Market Street will again demonstrate what made the Mackinac region click during its hey-day early in the last century.

NOTE.—In connection with the Beaumont project numerous societies, institutions and individuals have cooperated generously with the writer in a wide search for data; also, considerable documentary and printed matter was consulted. The aim was to explore everything bearing on the fur trade, historically and regionally, that seemed to offer the possibility of help. It is regretted that of the long list of those rendering assistance only the following can be mentioned here:

The Public Archives of Canada
Historic Monuments Commission of the Province of Quebec
The National Archives, Washington, D. C.
The New York Historical Society, N. Y.
Missouri Historical Society
State Historical Society, Wisconsin
Minnesota Historical Society
Mackinac Island State Park Commission
Burton Historical Collection, Detroit
General Library, University of Michigan
The late Professor Ramsay Traquair, McGill University
Dr. Arno B. Luckhardt, University of Chicago

Have You Contributed to the

BEAUMONT MEMORIAL

RESTORATION FUND?

Portrait of Beaumont Artist at Work

By Robert G. Wilder



DEAN CORNWELL

WHENEVER Dean Cornwell hears the rattling of instruments in a doctor's office, his heart goes plunk and his flesh gets clammy. On top of that it brings back vivid memories of the time he spent gathering research material for his famous painting of Beaumont and St. Martin.

It all started when Mr. Cornwell was commissioned by the Wyeth Laboratories of Philadelphia to paint a series of canvasses entitled, "Pioneers of American Medicine." Never before had he been near a doctor save for the times his mother would "drag" him to the family physician in Louisville for a cowpox shot.

Back in 1938 when Wyeth selected the great Beaumont-St. Martin epic for its first canvas, Dean Cornwell spent some time in Chicago with Dr. Arno Benedict Luckhardt, the eminent physiologist of the University of Chicago and collector of Beaumont memorabilia.

"Dr. Luckhardt and I were sitting in his study talking about Beaumont," he related. "Every now and then the good doctor, a Beaumont enthusiast, would give me a demonstration of one of Beaumont's techniques. It was the one where Dr. Luckhardt showed me how Beaumont amputated legs with one quick cut without anesthesia that has made me 'afeared' of doctors ever since."

High above the noise of Manhattan in his studio apartment in New York, Cornwell's eyes flashed as he related his recollections of preparing to paint the Beaumont-St. Martin masterpiece. He is an extremely alert and intense man, slender (because he's on a diet which he doesn't need, he says), and extremely charming.

His studio, where the Beaumont painting was born, is huge and high-ceilinged, cheered by massive panes of glass from floor to ceiling through which the morning sun glows as brightly as the myriad night lights of a city twinkle. In another corner half obscured by piles of sketches, half

completed illustrations, and works which he doesn't like, is a medieval fireplace which works, he says.

In the middle of the room stands the huge easel with palette close by—his tools. On the easel stands a partially completed portrait of the first president of the New England Bell Telephone Company. You see, Cornwell, in addition to being one of the top-ranking illustrators in the United States, is also one of the most distinguished portrait painters.

In another corner of the room, half covered with dust and cobwebs, is an old West Point cadet uniform. This, he says, was worn by the model he employed to pose as Dr. Beaumont.



Dean Cornwell, famous American artist, finishing the "Dr. Beaumont and St. Martin" painting in 1938

In order to paint the Beaumont canvas Cornwell spent almost two years of work. Prior to the actual painting, weeks of research and preliminary sketching were required so that absolute authenticity of detail was insured.

When Wyeth first contemplated the Pioneer series, executives of the company wanted to have an impartial list of truly pioneer figures in American medicine. Organizations from far and wide who heard about the project put forth their beloved candidate. The job of selection was an involved one, a task in which Wyeth wished to have no part. Therefore, Wyeth representatives contacted Dr. Henry Ernest Sigerist who at that time was professor and director of the Institute of the History of Medicine at Johns Hopkins University. He was invited to select those medical pioneers who should be painted.

Heading Dr. Sigerist's list was Dr. William Beaumont whose work gave medicine its first reliable information on digestion. His book, "Experiments and Observations on the Gastric Juice and the Physiology of Digestion," is a classic report on the numerous experiments he performed.

Once the list had been compiled all was in readiness to commence save for the selection of the artist. The work of the top illustrators in the country was examined, and from among this group Dean Cornwell was selected. His skill in the decoration of the Lincoln Memorial, and the warmth and vibrancy with which he captured California's history in the Los Angeles Public Library convinced Wyeth officials that he was their man.

Soon after he was commissioned to do the series, Cornwell journeyed to Chicago to spend some time with the outstanding authority on Beaumont in this country, Dr. Arno Luckhardt.

After spending about a week with Dr. Luckhardt, Cornwell was so "steamed up" with the romance and feeling of the Beaumont-St. Martin incident that he was racing to get started with the canvas.

"It was a challenge to me," Cornwell said. "When I was first approached by Wyeth officials I was only lukewarm, but as I delved into the history of Beaumont and St. Martin I was fascinated.

"Here was Beaumont with no formal medical education who had served for only two years as an apprentice to a New England doctor; then he became an army surgeon. A man of lesser intellect would never have recognized the possibilities Beaumont encountered. But he had New England horse-sense. He knew what he wanted and got it."

As to details Dr. Luckhardt was of tremendous help to Cornwell. His home is filled with Beaumont possessions. Hanging in a glass case is an old military jacket which Beaumont wore. In other places he has Beaumont's account book, his saddle bags, and surgical instruments.

"Reliving those days of 1822 on Mackinac Island when St. Martin was shot in the stomach at the old trading post, fired my imagination,"

Cornwell said.

"Beaumont had his problems keeping St. Martin on hand for his studies. He was a recalcitrant patient in the real sense. I'm told Beaumont eased his trials by keeping plenty of liquor on hand to entertain the French-Canadian," Cornwell added.

"Then, too, when the word spread from settlement to settlement, Beaumont encountered difficulties with other doctors who were more highly trained scientists. They were constantly pressuring him to give St. Martin up to them, but Beaumont would not let him go until his studies were completed."

When he returned to his New York studio, Cornwell set out to find people who would serve as models during the painting of the canvas. To find someone in New York who would serve as a stand-in for St. Martin to the average person might seem like a chore. But not to Dean Cornwell. Through an Indian Trading Post Cornwell discovered a young brave who would do perfectly.

On the second day after he had gone to work, Cornwell received a call from the Indian's wife. He laughed heartily as he told the story. It went something like this:

"Mr. Cornwell, are you going to pay him tonight . . . well, don't, at least not until I get there. Last night he spent all his money in a saloon."

The Indian girl (who in the painting represents St. Martin's wife) came from a New York model agency. She is still posing in New York art circles. The child came from the John Robert Powers Model Agency, and the man who posed as Dr. Beaumont was a young college student from Virginia. "We didn't want to make the child an Indian so I exercised artistic license," Cornwell recalled laughingly.

The scene which is depicted on canvas shows Beaumont in a moment of brown study during his oft-repeated routine collections of gastric juice. It is laid in a Mackinac Island cabin.

"I read Beaumont's book through a half-dozen times. He outlined, as you know, all the details of his work, including the length of the pure rubber hose with which he drained the juices from the opening.

"When it came time for me to start the actual painting I got a doctor up here in my studio who with the aid of Dr. Beaumont's book placed the hose exactly where it should have been over the gastric fistula. I even made him place the bottle where it should be in Beaumont's hand. Then I took photographs of the positions of the furniture and models, and from the photographs I painted the canvas," Cornwell explained.

"Of course, the photographs left a lot to be desired, and I am often asked, how can you paint the finished product with such unerring accuracy? The answer is this: to be a successful illustrator you have to have a background of experience which helps you to form impressions. I knew a lot about buckskin clothes and log and stone cabins from my early boyhood in Kentucky, and that which I didn't know I had to find out. As a matter of fact in order to gather background material for 'Conquerors of Yellow Fever,' another in the Pioneer series, I travelled all the way to Cuba."

Cornwell's most difficult problem in connection with painting Beaumont-St. Martin was to find a picture or likeness of Beaumont. All that was available were artists's drawings, etchings and engravings which reflected only the artist's interpretation of how Beaumont looked. "I came as near to his likeness as I could with the information available."

Painting Beaumont and St. Martin turned out to be a real thrill for Dean Cornwell. He said that he felt as if he had had a complete medical education by the time it was over. He said that he waited a long time for a doctor to question a detail in the painting, and when the question came he was ready for it.

One day a physician at a luncheon complimented Mr. Cornwell on the painting. However, the doctor added that he was surprised to see such an eminent artist commit such an error as to have a rubber hose pictured as early as 1822. The doctor chided him politely that rubber hoses were not even in existence in that era.

In the customary good-humored Cornwell manner, the artist referred the physician to the page in Beaumont's report in which the use of a "pure rubber hose" is mentioned.

"I felt better after that," Cornwell added.

"A little from many will build the Beaumont Memorial—a monument to the generosity of Michigan's medical men."—Otto O. Beck, M.D.

The Future of the Beaumont Memorial

By W. F. Doyle
Chairman, Mackinac Island State Park Commission

TO OUTLINE the "Future of the Beaumont Memorial" without recording for history some of the heretofore unreported activities of my associates on the park commission and their eagerness to assist in preserving and restoring the embryo of this shrine to medical history, would be to omit an important chapter from an otherwise momentous chronology.

The seed of restoration was actually planted by two citizens of Ann Arbor, Dr. Fred A. Coller, noted for his work in the same field of medicine that made the name "Beaumont" internationally famous, and Joseph H. Thompson, chairman of the Mackinac Commission in 1941. My job was to nurse that seed to maturity.

I was a patient in University Hospital at the time. Dr. Coller consulted on *my* "stomach ailment." Joe Thompson visited me each day to help pass the monotonous hours between x-rays, basal metabolisms, blood tests and the many other strange experiences of one undergoing a "complete physical." Because there was no "window" in my stomach through which the doctors could peer, it was necessary for them to take the longer, but more scientific, course to determine the cause of intestinal "kick-ups."

It was on that occasion that the three of us drew the hoped-for blueprint and recorded in our mental notebooks those aspirations which are now approaching reality. The architecture, the financing, the other historical aspects and the progress of that early dream are all contained in articles appearing elsewhere in this edition of THE JOURNAL.

The future of this shrine, once the physical work of restoration is completed, rests in the hands of two great institutions, the Michigan State Medical Society and the State of Michigan itself. When finished, the building will be the property of the State, but both the active interest and the close and jealously guarded determination that it not become "just another building" must be constantly insisted upon by those who follow in the footsteps of the medical doctors and Park commissioners of today.

The "Earley House," as the old building is commonly known to Mackinac Islanders, in the years ahead, should be properly fitted and equipped with such papers, instruments, etchings, drawings and other historic relics as will give a visual picture of the scene enacted by Beaumont, St. Martin and others on the day of the near fatal shot-gun explosion—June 19, 1822. The State should assume the maintenance and responsibility. The doctors should willingly accept the challenge to keep a vigilant eye on its use, interior care and constant search for ways to make it the recognized Beaumont shrine of the world. Other communities have rightful claim to the memory of Beaumont, but only on Mackinac Island where the actual accident took place and where the original medical experiments were performed is there first claim to edify the name of this famous person.

And to the Mackinac Island State Park Commission of the future let there be a word of admonition. Let it never be forgotten that on the very soil over which they hold jurisdictional authority a great chapter in Michigan, American and medical history was written. That chapter must be preserved.

In the years to come when countless thousands of persons visit the Island to enjoy its beauty and to drink of the fragrant vintage of the early nineteenth century, let the Beaumont shrine tell its own story of the life and hardships of the voyageur, the early settler, the men and women who braved the wilds and hazards of the "north country" that the spread of commerce, religion and medicine might not be impeded. Let it portray the brilliant and successful efforts of the young Fort surgeon to save a life when the lives of fur trappers were not held in too high a regard.

After the restoration is finished, a permanent standing committee with provision for rotation and supplement should be named. This committee should be composed of interested doctors who will dedicate themselves to the "Future of the Beaumont Restoration." A similar committee of Park Commissioners should be created.

Together, those interested citizens can make Mackinac Island a gathering place for annual pilgrimages of doctors and lay people the world over.

The seed has been planted: the ground is fertile. The future rests with those who love medical history and will cherish its preservation.

Whatever little contribution I have made is insignificant in ratio to its fullest potential.

Preventive Medicine in the General Practitioner's Office

By J. S. DeTar, M.D.
Milan, Michigan

IN A PANEL discussion like this one it is one thing to tackle a subject such as has been assigned to me, and it is another thing to stick to it. Preventive medicine most assuredly is practiced in the general practitioner's office but is by no means limited to the office, because the general practitioner spills over into the preventive field in his county medical society meetings, in his contacts with his local health department, in his membership in his local community health council, and in his postgraduate training sponsored by the American Academy of General Practice. So, while I may slide over into the fields to be covered by Dr. Gassett, Dr. Baehr, Dr. Dana, and Dr. Bierring, I doubt if I can slide very far in my allotted time. So let's start in the general practitioner's office and see where we go from there.

Role of the General Practitioner

A general practitioner is supposed by some to be a mouse-like individual with a chronic inferiority complex about his medical status, who sits in the back row at medical meetings taking notes with a dull pencil on the edge of the morning paper. With all the timidity and reticence supposed to be characteristic of my medical classification, I should like to admit to you that I believe the general practitioner to be by all criteria the most important cog in the preventive medicine machine. With his co-operation, organized public health projects may succeed. Without his co-operation they are doomed before they start.

This is because it is the general practitioners who outnumber all the specialists combined, who generally see the patient first, and who are the family counsellors in medical matters. I hold that this broad statement applies to educational campaigns conducted by the United States Public Health Service, by the State Health Department, and by the local health unit. And if this be true, it might be worth while to spend a little time investigating the general physician's place in the preventive medicine picture.

Actually I have only one point to make. It is this:

The general practitioner is the key man in the preventive health field. He is generally a very busy man, and cannot be expected to perform well in specialty fields unless he has had special training in those fields, and is able to take time from general medicine to devote to special medical interests. Public health is a special field requiring special training, just like thoracic surgery. In the preventive field the general practitioner relies on organized public health experts to map out the programs first, then to seek his co-operation to implement those programs. However, in preventive medicine, as in other fields requiring special knowledge, the G.P. must be educated and led, not pushed; he is still quite an individualist. The final success of any project in the preventive health field depends on the close co-operation and the integration of the efforts of the leaders in organized public health, and of the general practitioners.

Immunizations in the Office

If you will forgive personal references, I should like to draw on local experiences; case studies, if you will. I live and practice in a little town of 2,500 persons in a county of 100,000. Four years ago our county health department director informed the county medical society that immunizations in the county were not at the desired level. I didn't believe him, so I took a sample of 100 babies delivered in my practice.

I was amazed to discover that only 47 per cent of my own babies, delivered by myself, had been immunized at the end of the first year of life, despite routine instructions to the mothers to bring in the children at six months of age. Other surveys yielded like reports. In order to improve our Public Health standards, the county medical society agreed to co-operate in immunization clinics (free clinics) over the county. The plan worked beautifully. Recently, after four successful years of free immunization clinics, the county health department director informed the county medical society that immunization was at a high level, and perhaps the free immunization clinic idea could be dropped. The county medical

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society refused to discontinue the free clinics. This is an interesting commentary on the change in attitudes of general practitioners over the last decade, from one of at least disinterested toleration of public health efforts, to one of enthusiastic co-operation.

Parenthetically, I made another survey last week of 100 obstetrical deliveries made in 1951 to see if my percentage of immunizations had increased in the past four years. (You see, it does something to a general practitioner who is giving free immunizations at the school to a line of children, to recognize the banker's daughter and the manufacturer's son in the line.) So I decided to see if my present methods in preventive medicine had improved my score. I was surprised to find that of 100 cases:

78 had completed their immunizations
3 had completed all except for small pox
3 had taken two immunizations only
3 had taken one immunization only
12 had not kept their appointments
1 had refused

Thus, 87 per cent had responded to the system used, which consists of making an appointment for the first immunization two months after the six-weeks postpartum office call. Then, on each call, a definite appointment is made for the next immunization in one month, until all are completed. Then a postcard is filled out to be mailed one year hence when a booster dose is due. The system really works, and I believe my patients are average people living in an average town.

My conclusion is just this: After a general practitioner has made every effort to achieve 100 per cent immunization in his practice, he should then welcome the help of the county health department to pick up the stragglers. Then he should co-operate in free clinics for the purpose.

Other Fields

Immunizations constitute only a small segment of the preventive medicine field of the general practitioner. Heart disease, cancer, tuberculosis, arthritis, as well as psychosomatic disorders, all have their preventive phase (or early detection phase) and their treatment phase. I wonder how many people here know the extent of the program the general practitioners have set up for themselves in the preventive field—through their own organization, the American Academy of General Practice. A mere five years old, this group of over 15,000 general practitioners has undertaken to raise its own standards by a requisite of continued postgraduate study to maintain eligibility for membership, by intense activity in the medical educational field, and by constant efforts in the hospital field to preserve for the physician in general practice the right to practice medicine and surgery as permitted by his special qualifications and his license.

The American Academy of General Practice

From the standpoint of preventive medicine, you would be interested in some of the subjects accorded prominent places on the scientific agenda at the annual meetings of this general practitioner organization during the past two sessions.

Dr. Paul Popenoe talked about marriage and family relations; Dr. William C. Menninger talked about the sexual aspects of marriage; Dr. Dorothy Baruch talked about new methods in child discipline; then they engaged in panel discussion on, "Counseling Factors in Family Life." This entire group of discussions was devoted to prevention of disease in the field of psychiatry—a preventive treatment which must be administered by general practitioners or not at all.

Dr. C. F. Gastineau talked on, "Obesity and Thinness." Dr. Richard A. Kern discussed, "Our Geriatric Patients" last year, and "The Forties" this year, and Dr. O. Spurgeon English talked on, "Problems of the Teen-Agers." Dr. George M. Wheatley's subject was, "Help Immunize Me Against Accidents."

I mention these titles because they represent a distinct victory for the forces of preventive medicine; here we see the general practitioners, through their own organization, focusing attention directly on the prevention of disease—a field occupied fifty years ago by only the most progressive of public health leaders.

The Health Council Idea

We have talked about preventive medicine in the doctor's office, in immunization clinics, and in the physician's postgraduate studies. Where does the Health Council come into the picture on the state and community level?

Actually, the whole health council idea is a projection of the concept of preventive medicine from the state level down to the community level —where general practitioners and public health directors, and all others interested in health may find common meeting ground for the solution of their community health problems. In Michigan, both delegates from the State Medical Society to the State Health Council are general practitioners.

And, interestingly enough, as an example of the natural trend toward co-operative effort between organized medicine and public health, we now find working with these general practitioners on the Board of Trustees of the Michigan Health Council and with representatives of farmers, nurses, hospitals, Blue Cross-Blue Shield, three outstanding public health directors, one from the State Department, one from Detroit, and one from Ann Arbor.

State Health Council and Preventive Medicine

You may feel that a discussion of State Health Councils is far afield from my title of "Preventive Medicine in the General Practitioner's Office." Not so far, if you follow this sequence of events: last year the Michigan Heart Association pondered over the idea that perhaps it is illogical to ask people to go to see their doctors once a year for a cancer examination, once a year for a heart examination, once a year for a diabetes examination, once a year for a rheumatism examination, and so on. So the Heart Association proposed to the Michigan Health Council, which has all these interests represented on the state level, that they all should be called together to see what could be done.

Action was fast. Representatives of the State Medical Society, of the Schools of Medicine, of State Associations of Heart, Diabetes, Arthritis, Cancer, and Tuberculosis met, discussed, and agreed that an examination to be called a "Periodic Health Appraisal" should supplant the various special field examinations. A hundred questions were boiled down to fifteen—to be answered by the patient. Work is in progress now to educate the public as to the need of a periodic health appraisal, and to educate the medical profession as to the need of doing an adequate examination when the patient presents himself at the doctor's office, with completed questionnaire in hand. The potentialities of this movement are tremendous.

This type of effort represents a new high in co-operation in the field of preventive medicine. And it all channels right down to the general practitioner's office, where cancer, and heart disease and psychoses may be detected while they are still curable.

Teamwork

Preventive medicine, as an entity, can certainly not be limited either to the health director's office, or to the physician's office. Close, continuous co-operation between the two is essential if the job is to be done.

Tuberculosis

Close co-operation is necessary in tuberculosis case finding and follow-up care. Cases are usually discovered either by the general practitioner or in a mass chest x-ray campaign. If the State Health Department discovers it first, the physician is notified, calls in the patient, procures x-ray follow-up and sputum tests, and usually arranges with his county health department director for sanitarium care if necessary.

Sanitation

Consider this example of co-operative effort in the sanitation field. At 5:30 a.m. a Traverse City physician phoned the health director explaining that within the past three hours he had seen three patients with severe gastroenteritis. The director went immediately to his office and asked medical society aid. By mid-morning, a pin map was set up showing that all cases were falling in one-half of the city. Prompt investigation revealed defective chlorination in one pump serving this half of the city. This problem, solved within twelve hours, is a beautiful example of the co-operation necessary to achieve results in the preventive field.

Contagious Disease

In the field of contagious disease fast action by both general practitioner and health director is often necessary. A Barry County physician called his health director at 1:30 a.m. requesting diphtheria anti-toxin. The director was at the patient's home in thirty minutes with the anti-toxin. The parents allowed treatment of the patient, but refused to allow immunization of others in the family for religious reasons. The patient was saved, but one younger brother died. In this epidemic 400 school children had positive throat cultures. Twenty-two cases of diphtheria developed—and there were four deaths. Here was an instance in which the general practitioner and the health director worked hand in hand for weeks. Neither could have done the job alone. This is also proof of the need for more complete immunization.

Contamination

An interesting Sherlock Holmes story of a physician and his health director demonstrate the interdependence of the two. Each would be at a great disadvantage without the other.

One Sunday morning a general practitioner was called to several homes where he found evidence of food poisoning. He called the health director; together they visited several homes. They traced all cases to a single restaurant. Soon they found that gelatin dessert had been ingested by all patients. Working together that afternoon they found that the chef used tartaric acid crystals in his recipe. They checked his tartaric acid crystals and found that the druggist had provided tartar emetic in error. That same afternoon they appeared on the radio together and explained that the situation had been corrected through co-operation of physician, health director, restaurant owner and druggist. (All medical bills were paid by the druggist's insurance company.)

Part-Time Health Officers

"Can a general practitioner, with his increased knowledge and awareness in the field of preventive medicine, do also the job of the health director, together with his practice?"

Considering that one-third of all counties in the U.S. still are unprotected by organized Public Health Units, the question is still important although it was more commonly asked a generation ago. Seeking an answer, I secured permission from my county health director to borrow his appointment book. Selecting at random one week this winter—(I just happened to open to January 14), I checked his schedule for the purpose of determining, if possible, whether I could handle public health work in addition to private general practice.

Here is what I found for Monday, January 14:

8:30: Review of correspondence.
9 to 10: Meetings with individual staff members.
10:05 Meeting with chief public health engineer, supervising public health nurse, 2 assistant nurses, and office manager to plan week's activities; discussion of proposed sanitary sewer; discussion of sanitary fill; discussion of impending county medical society booster immunization program.
12:00: Luncheon with all staff members.
2:30: Addressed Federation of Women's Clubs on "Activities of the County Health Department."
7:30 to 9:30: Attended city council meeting to advise councilmen on rodent control, milk and meat inspection, restaurant inspection.

Every day was just like that. Totaling up his activities for the week, I found the following in his week's activities:

Office staff conferences—4
Office conferences with individual callers—9
Luncheons with office staff—1
Speeches—1
Evening meetings—3
Afternoon meetings—1
Branch office calls—1
Scout exams—1
Meeting to advise on county building code—1
Hours in teaching public health—3
Official dinners—1
Trips to legislature—1
Conferences with legislators—2
Conference and trip on migrant labor problem—4 hours
Meeting with subdivision planners, with trip—1
Meeting with group seeking annexation to city—1

I asked this director what he did with his spare time. He replied that he spent most of it on the phone, "concerned with everything from state and local legislation to citizens' questions as to why a chicken stinks when it is purchased at a local market." I will confess that I was amazed to learn the extent of the work of a county health department director. As a general practitioner in an average town, with an average practice, I am frank to confess that I could not do the work of a public health officer on county or township or community level for two reasons: I don't have the time, and I don't have the training. It will be a happy day for the health of the American people when every county in the United States is protected by an organized public health department.

Conclusion

Preventive medicine is a broad field, and it is becoming more important with every passing decade.

The prevention and early detection of disease are the general practitioner's job. Without his co-operation success in this field is impossible. The GP looks to public health directors for leadership on the local level—for guidance in matters of preventive medicine. Both practicing physician and public health director would do well to capitalize on the most potent community force in the preventive medicine field: the community health council. No one has a corner on this market. All it takes is a man with a purpose and some drive behind the purpose. And, just a word of advice to public health directors: when you have a good project, and you know it is good—and you want the support of the general practitioners, don't assume we are unwilling just because we are slow to jump on the bandwagon. Just lead us gently; don't shove us. It works better.

Exfoliative Cytology in Periodical Physical Examinations

Progress Report

By Nelson Taylor, M.D., and
Donald G. Ross, M.D.

Grosse Pointe, Michigan

IN 1950 an initial report[16] on the value of exfoliative cytology in periodical physical examinations was published in this journal. Since that time the study has been continued. In four years of observation it now includes 1,554 smears on 1,289 patients, with malignancies established in nineteen patients.

Technique

The method by which material may be obtained for examination according to the procedure of Papanicolaou has been previously reported.[16] The only change from that procedure is the variation in obtaining prostatic specimens. A broader field of observation is covered if, after prostatic massage, the urine is collected. This specimen is immediately centrifuged and the sediment fixed. The slide can then be examined for malignant cells. This provides a survey of the complete genitourinary tract rather than of the prostate alone. If malignant cells are observed, measures may be taken to localize the site of origin.

New methods for obtaining gastric specimens,[18] expanded use in detecting pulmonary neoplasms,[11] as well as modifications of the vaginal smear[14,17] have been recommended. Thus, there are constant efforts to improve the efficiency and accuracy of this phase of cancer detection.

Material

In this series, all were private patients and most were seen during the course of complete physical examinations. The study was begun in June, 1948, and terminated in March, 1952.

Results

The series (Table I) included 1,554 smears on 1,289 patients. The total number of malignancies was nineteen. In this group there were 1,281 negatives, 265 questionable reports, and one false negative.

TABLE I. EXFOLIATIVE CYTOLOGY SMEARS

	Negative	Questionable	Positive	Total	
				Patients	Smears
1. Lip	1			1	1
2. Mouth		1	1	1	2
3. Feces	1			1	1
4. Peritoneal	2		2	2	2
5. Breast		1	1**	1	2
6. Nipple Secretion	4			4	4
7. Pleural	11	2	6	11	13
8. Gastric	18			18	18
9. Sputum	19	3	3	19	22
10. Urine	20		(1*)	21	21
11. Prostate	253	18	1	254	272
12. Vaginal	951	240	5	956	1196
	1281	265	19	1289	1554

**Papanicolaou negative; biopsy positive.
*Same patient as prostatic positive.

Papanicolaou smears were examined in one patient with an ulcerating epidermoid carcinoma of the sublingual region. The first attempt was reported as questionable and the repeat was positive for malignant cells. A smear was made on one lip lesion and this was reported as negative. One attempt to make a Papanicolaou smear from fecal material was reported as negative. Smears were made from ascitic fluid of two patients and malignant cells were found in both, one had a cystadenocarcinoma of the ovary and the other a lymphosarcoma.

One patient had a massive, ulcerating medullary carcinoma of the breast. A direct smear from this was reported as negative although biopsy was positive. Nipple secretions from four patients were negative. Aspiration of pleural fluid in eleven patients revealed malignant cells in six.

Papanicolaou smears on fasting gastric specimens in eighteen patients revealed no malignant cells. In two of these patients, radiographic studies were reported as gastric ulcers, probably malignant. Pathological sections of gastrectomy specimens in these two revealed benign ulcers. Sputum Papanicolaou smears in nineteen patients included the finding of malignant cells in three who proved to have bronchogenic carcinomas. Cytologic smears on the sediment of centrifuged urines in twenty-one patients included one in whose specimen malignant cells were demonstrated. At operation, adenocarcinoma of the prostate was found. This, also was the only positive in 253 men on whom prostatic smears were made.

Vaginal smears (Table II) comprised the majority of the examinations: 1,196 smears on 956 patients. Smears were reported as questionable or positive and repeated in 240 patients or 25 per

TABLE II. VAGINAL SMEARS

Patients	951	100%
Repeated Tests	240	25%
Confirmed Malignancy	5	0.52%

Ratio: 1 Positive : 191 Patients.

TABLE III. OPERATIONS

Dilatation and Curretage	13
Cervical (Stump) Amputation	2
Hysterectomies	11

TABLE IV. UTERINE MALIGNANCIES

1 Carcinoma in Situ
2 Early Invasive
2 Late Invasive
(3 advanced carcinomas in patients who earlier declined complete examinations).

TABLE V. VAGINAL SMEARS

Age Range		
Decades	Patients	Malignancies
III	27	
IV	159	
V	276	1
VI	176	1
VII	78	2
VIII	27	1
IX	9	

TABLE VI.
DETECTION COST IN UTERINE MALIGNANCIES

	Patients	Cost to Patients
Total	951	$6657
Negatives	946	6622
Malignancies	5	35
To Find One Malignancy	5	1337 (or $7)
To "Save" One Malignancy	3	2228 (or $7)

Explanatory Note To All Patients

The exfoliative cytology (Papanicolaou) examination is a SCREENING test for cancer of ONE PARTICULAR PART. While the accuracy of interpretation is constantly increasing, it is still not 100 per cent. Occasionally there are technical reasons for repeating the test.

cent; five were positive for malignancy. This is a ratio of 1 positive in 191 patients.

Operations (Table III) on this group of women included curettage and cervical biopsy in thirteen instances, among which were five with uterine malignancies. These were done chiefly on the indications of gross cervical lesions such as polypi or erosions. Amputations of cervical stumps were accomplished in two patients with persistently questionable Papanicolaou smears because of the greater incidence of cancer in these retained fragments following supracervical hysterectomy. Malignancy was not found in either case. Early in this study, one hysterectomy was done elsewhere solely on the indication of a questionable Papanicolaou. Serial pathological sections were not run, but on the routine sections, no malignancy was demonstrated. Additional hysterectomies were done in seven women for other indications and also in the two patients with early invasive carcinoma and the one with carcinoma *in situ*. The two patients having advanced carcinomas received only radiation therapy (Table IV).

The age range is shown in Table V with the occurrence of malignancies in the fifth to eighth decades.

The fee cost of detecting uterine malignancies is shown in Table VI and totals $6,657 for the 951 patients. The 946 patients who received negative reports paid $6,622. Thus the five patients receiving positive reports paid only seven dollars each, or a total of $35. The fee cost of detecting one uterine malignancy was $1,337. With the presumption that the two patients with early invasive carcinoma and the one with carcinoma *in situ* have been treated in time to eradicate the cancers, then the cost of detecting each "cured" patient was $2,228.

An incidental observation in this study has been identification of the phase of the menstrual cycle (Table VII) in many of the smears. Based merely on calendar estimations of accuracy, it is presumed that agreement occurred in seventeen of twenty-one reported as being preovulatory, in seventy-one of ninety-three postovulatory specimens and in 356 of 366 with low estrogen levels. In sixteen patients receiving estrogen therapy, evidences of exogenous stimulation were noted in all of their smears. Hyperestrinism was noted in four instances, but without estrogen assay, there was no confirmation.

During complete examinations, breast transilluminations were recorded in 314 patients (Table VIII). By comparing the relative degrees of opacity with estrogen levels as reported on Papanicolaou smears, direct correlations were noted. That is, the more opaque the mammary tissue to transillumination, the higher the estrogen level, or, the translucency was found to vary indirectly with the estrogen level. Agreement was found to occur in 276 of 314 instances, or 88 per cent. Eight of the patients where there appeared to be discrepancies were found to have hypothyroidism. Mammary myxedema, therefore, accounted for the relative opacity in this additional three per cent, raising the degree of accuracy to over 90 per cent.

TABLE VII. CYCLIC DETERMINATIONS

	Reports	Agreement
Preovulatory	21	17
Postovulatory	93	71
Low Estrogen	366	356
Exogenous Stimulation	16	16
Hyperestrinism	4	

TABLE VIII. BREAST TRANSILLUMINATION

Total	314	
Agreement	276	88%
Myxedema	8	3%

Translucency varies indirectly with the estrogen level.

During the four years of this study (Table IX), forty patients were examined each year; 103 patients were observed for each of three years and 150 for two years. No patient was found with uterine malignancy who previously had had a negative smear. On the other hand (Table IV) three patients who failed, as previously advised, to have physical examinations which would have included Papanicolaou cervical smears, later were seen with advanced uterine malignancies.

Discussion

The use of exfoliative cytology as a diagnostic (as contrasted with screening) method is exemplified in the first ten sites listed in Table I. The incidence of malignancy in this group is disproportionately high because, in most instances, cancer was suspected clinically. In all but one case (breast), the reported smear was verified. Thus, it would appear to be of value as a diagnostic measure.

However, none of the thirteen patients in whom suspected malignancy was verified, survived. Therefore, utilized in this fashion, the test becomes of value statistically but of little help to the patient. This limited study emphasizes the *real* usefulness of the test. That is, its application in the office of the private physician: general practitioner, surgeon, gynecologist or internist who is willing to devote the brief time and effort required to screen patients for malignancy. Every such office where comprehensive physical examinations are done thus becomes a cancer detection center.

One uterine cancer in every 191 patients is not a high percentage yield, but to the one person "saved" by the early establishment of that diagnosis, this method becomes of inestimable value. Other investigators have found the incidence of detection to be between 0.2 and 2.5 per cent.[5,6,7,9]

TABLE IX.

Patients Observed for Two Years	150
Patients Observed for Three Years	103
Patients Observed for Four Years	40

The cost of finding one patient with uterine malignancy in this series may be expressed in more than one way. It may be based on the fee charged for the service: seven dollars for interpretation of the smear. Thus, to the patient with the cancer, the total expense of finding her lesion was seven dollars. It may also be stated that the cost, spread over 191 patients, was $1,337, or, based on the number of patients probably "cured," $2,228 to "save" one patient.

This differs greatly from public health or charity clinic surveys where the cost has ranged from[9] $120 per case detected to[3] $357.45. These latter figures are based on the expense of materials and technical help with no charge for professional interpretation.

Even these figures[8] are excessive from the standpoint of public health and only one life in 191 is not statistically important in bureaucratic parlance.

Hence, an excellent opportunity is afforded private practitioners to save lives by adding this simple procedure to the all-important periodical physical examination which will detect not only cancer, but also heart disease, tuberculosis, diabetes, arthritis, multiple sclerosis and all the other scarehead diseases which recurrently have "weeks" devoted to their publicity.

It must be emphasized as has been done before[16] and elsewhere[4,10] that exfoliative cytology does not replace established diagnostic measures. Its chief value is in screening and not, as is sometimes advocated, using it in "selected cases."[15] Others[2] have stated that the percentage of false negative Papanicolaou smears is too great, as much as 3 per cent. Thus in our small series of 951 patients, twenty-nine would be expected to have uterine malignancy —quite unlikely.

However, this does serve to underscore the need for annual physical examinations which include Papanicolaou smears, although it may be found later that the intervals between tests may be safely prolonged. In any event, many years will be required to finally evaluate the method.

It now appears that the need for extension of the routine use of exfoliative cytology is pressing. It is hoped that the procedure which includes prostatic massage preceding collection of a urine

specimen for Papanicolaou stain of the sediment may enhance the value of the test in men.[12,13] More frequent use of sputum Papanicolaou smears[1,11] may serve to make the outlook in pulmonary malignancy a little brighter, also.

Summary

1. A four-year study of exfoliative cytology includes 1,554 smears on 1,289 patients with nineteen malignancies.

2. Smears have been found positive for malignancy on a lesion of the mouth, from ascitic fluid, pleural fluid, sputum, urine, prostatic fluid and on vaginal smears.

3. An improved method of genitourinary screening provides for staining of sediment from urine excreted after prostatic massage.

4. On 956 patients 1,196 vaginal smears were obtained and five were positive; one malignancy in 191 patients.

5. The fee cost of detecting one uterine cancer might be considered to be $1,337 but actually it is only $7 because the patient with the malignancy pays for only one smear. (The procedure is reportedly too expensive in proportion to the number of individuals "saved" to justify its use in public health.)

6. Estimation of the phase of the menstrual cycle is only moderately accurate but identification of reduced estrogen level is quite reliable.

7. Translucency of the breast appears to vary indirectly with the estrogen level.

8. During this study no malignancy occurred in tissue from which a previously negative smear had been obtained.

9. Three patients who had previously refused exfoliative cytology later were found to have advanced uterine malignancies.

10. The period of observation in this study has been too short and the size of the series much too small for statistical significance.

Conclusions

I Exfoliative cytology is an important screening procedure in detection of malignancy, especially uterine.

II Its greatest value is in association with periodical physical examinations.

III This method should supplement but not supplant established diagnostic measures.

Acknowledgment

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Most of the smears reported in this series were interpreted by Doctors Joseph Kasper and George Fritz.

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Dysphagia

By Donald S. Bolstad, M.D., and
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IN A DAY when the number of articles approaches the reader potential we are content to present a subject which attracted considerable attention at the recent AMA convention in Atlantic City. The content is not original and the intent is to bring to general awareness the diagnostic aids and treatment available to the patient who complains chiefly of difficulty in swallowing.

Dysphagia is the most common symptom of esophageal disease. Occasionally there will also be a complaint of painful swallowing, burning on swallowing, and full sensation in the chest, but difficulty in swallowing will be the voluntary complaint. Of considerable importance in such cases is a detailed history as to:

(1) the nature of the onset of the dysphagia, whether sudden or gradual,

(2) the periods during which the symptom is most evident, i.e., between meals, at beginning of the meal, toward the end of the meal, et cetera,

(3) the nature of foods causing the most severe aggravation of symptoms, i.e., solids, liquids, spicy foods, et cetera,

(4) other debilitating diseases which coexist or precede the symptoms, and

(5) whether vomiting occurs or whether food is regurgitated without evidence of having been in the stomach.

The following outline and classification will help the physician in making a differential diagnosis:

I. *Obstructive Lesions*
- A. Foreign body
- B. Tumor
- C. Caustics—Cicatricial Stenosis
- D. Cardiospasm (Achalasia)
- E. Diverticulum
- F. Congenital Stenosis
- G. Congenital Atresia with Tracheo-esophageal Fistula
- H. Esophageal Varices
- I. Scleroderma
- J. Plummer-Vinson Syndrome
- K. Angio-neurotic Edema

II. *Functional Dysphagia*
- A. Globus Hystericus

III. *Extrinsic Causes*
- A. Hiatal Hernia (Short Esophagus included)
- B. Aberrant Vessels (Dysphagia Lusoria)
- C. Outside Pressure: Abscesses of neck, aneurysm, aortic or cardiac enlargement, cervical exotoses, glossitis, Hodgkins' disease, Ludwigs' disease, leukemia, lymphosarcoma, laryngeal lesions, parotitis, tonsil hypertrophy, et cetera.

IV. *Inflammatory Lesions*
- A. Esophagitis—acute, chronic
- B. Tuberculosis
- C. Syphilis

V. *Neurological Lesions*
- A. Myasthenia Gravis
- B. Jugular Foramen Syndrome
- C. Multiple Sclerosis
- D. Progressive Bulbar Palsy (and Pseudobulbar Palsy)
- E. Acute Poliomyelitis
- F. Thrombosis of the Posterior Inferior Cerebellar Artery
- G. Other diffuse central inflammations or CVA's, e.g., botulism, rabies, tetanus, encephalitis, diphtheria

I. Obstructive Lesions

Foreign Body.—A foreign body in the esophagus promptly provokes dysphagia. Moreover, there is usually painful swallowing and a reluctance on the part of the victim to chew and dispose of his own saliva which will accumulate in the hypopharynx.[8]

The types of foreign bodies vary with the age of the patient. The child is most likely to have a coin, safety pin, or some small toy that instinct has prompted him to place in his mouth. In the upper extreme of years, edentia, whether compensated or not, hasty eating, and carelessness in masticating meat with bone subjects this group to ingestion and obstruction by chicken bones, pork chop bones and large boluses of meat of any type.

Diagnosis is not difficult with the symptoms

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above present. A child who cannot relate his sensations may hold his head stiffly to one side or may show a preference to a prone position. The x-ray is essential and should include all the structures from the nasopharynx to the ischial tuberosities. Flat objects, such as coins, always lie with their greatest diameter in the coronal plane of the body when in the esophagus, in the sagittal plane when in the trachea or larynx. A lateral film low down on the neck but clear of the shoulder will often show a bone or other semi-opaque object invisible in the anteroposterior exposure. A teaspoon of barium swallowed while being observed on the fluoroscope may localize the impediment. A wisp of cotton given just prior to the ingestion of the barium has been found to localize an impacted bone that is otherwise not visualized on the x-ray plates. The most frequent site of obstruction is in the cervical esophagus just below the cricopharyngeal constriction.

Treatment is removal by peroral esophagoscopy.

The prognosis of unremoved foreign bodies can be considered to be ultimately fatal. In experienced hands, removal is attended by less than 2 per cent mortality.

Tumor.—Great strides are today being made in the diagnosis and treatment of this distressing disease. Benign tumors, which are usually myomas, do occur[21] but are very rare.

Carcinoma of the esophagus is essentially a disease of men (10:1) over forty. Usually it is at about the level of the tracheal bifurcation.[29] While the lesions may be polypoid, infiltrative or ulcerating, all eventually show ulceration. Dysphagia with solids is the usual signal symptom.

Diagnosis is by barium visualization of the esophagus and esophagoscopy.

The advent of antibiotics and the discovery of the adaptability of the well-mobilized stomach to the thoracic cage have removed some of the fear once attendant on this diagnosis. However, the outstanding factor in the high mortality rate is the failure of the physician to consider carcinoma first in the differential diagnosis of dysphagia.

Statistically this lesion accounts for 2 per cent of cancer deaths reported; 75 per cent of these were over fifty when the diagnosis was made.

Cervical involvement is more common in the female, distal involvement more common in the male.

Squamous cell carcinoma is the type usually found, since the mucosa is squamous in type and is usually highly undifferentiated. Adenocarcinoma can occur in the distal one-third where mucous glands are present. How long it may persist without extension or metastasis is not known. Stenosis and stricture are frequent. Perforation into the trachea or a bronchus occurs but is unusual.

The differential diagnosis includes: diverticulum, foreign body, achalasia, idiopathic stricture, and extrinsic pressure.

Surgical management, which is the only hope of cure, is most adequately outlined by R. H. Sweet.[29] His publication indicates the procedure found most effective for the section involved.

Patients who have inoperable lesions can at times be kept relatively comfortable by repeated esophageal dilatations, although gastrostomy may have to be done.

While it is not entirely new, rotation therapy, the "spit" technique, or as it is currently called, "the merry-go-round" roentgen ray therapy has definite palliative value.[31] About 25 per cent so managed were alive after one year, and more than 15 per cent were alive after two years. Its greatest palliative measure is in restoring the ability to swallow by reopening the lumen of the esophagus. Once the problem of avoiding overdosage is removed and there is more accurate basis for calculating the depth dose, this form of therapy may offer even more than at present.

Caustics and Cicatricial Stenosis.—Chemical burns of the esophagus with their resultant residuals of stricture are fortunately only about one-tenth as common as they were prior to legislation requiring the proper labelling of caustics. Aside from the occasional suicide attempt, which is rarely successful, these usually occur in children under five who come from poorer families.

The immediate care of the victim is to give vinegar to neutralize caustic alkali (sodium hydroxide) and sodium bicarbonate to neutralize acids. Following this, treatment of the local reaction in the mouth and esophagus is necessary. This may be done by the administration of repeated doses of olive oil or of bismuth subcarbonate powder. Fluid intake must be maintained at a high level. Perhaps the most effective management, from the standpoint of preventing stricture, is that outlined by Salzer,[20] ably summarized recently by Hanckel.[3]

After initial neutralization, a Levine tube is in-

serted and left in place until peroral bouginage is begun, usually in two or four days. Gastric lavage may be carried out through the tube and may prevent pyloric stenosis. After allowing time for the acute phase to subside, dilatations from above were done, usually blindly, employing mouth gag and restraints on the child. At present, however, there seems to be another possibility with the advent of the Tucker indwelling cannulated bougie.[31] This may be placed at the time the cicatrization is developing. The length of the bougie is such that it will pass into the stomach of the child. The upper end should be suspended in the esophagus so that the slender tip and suspension string only are above the cricopharyngeus. Severe stenosis seldom occurs above the level of the suprasternal notch, and the opening in the bougie permits fluids from the mouth to pass into the stomach through the strictured area when the bougie is properly placed. Tucker recommends the bougie to remain in the stenosed area six to twelve hours. Bougie size increases as the stenosis decreases. The one serious drawback to an indwelling bougie, damage to the larynx, should not occur with this type bougie, since only the tip should be in the hypopharynx. Additionally, the Tucker cannulated bougie allows the saliva to pass through the central canal of the indwelling tube, and as the stenosis is dilated, saliva also passes around the tube. The major objection to this method is the fact that this bougie has to be passed blindly.

In severe burns gastrostomy may have to be performed, giving the esophagus complete rest and allowing proper nourishment. After the acute phase, the patient is given a heavy silk string to swallow, and retrograde dilatations with the indwelling cannulated bougie are begun. This can be done perorally, also, and may be easier for the patient. While many clinics prefer gastrostomy and retrograde dilatations for an already developed stricture, this clinic has found that the passing of a fenestrated bougie over a string, perorally, has been very effective and without risk. This procedure is done weekly, on an outpatient basis, the patient swallowing three to five yards of string beginning twenty-four hours prior to the appointment and reporting for passage of a Plummer-type of dilator over the string into the stomach at weekly to monthly intervals, until dilatations reach 45-F and the patient is able to manage dilatation with the Hurst mercury dilator, 44 to 45-F, at home. The one contra-indication seems to be a previously present gastroenterostomy.[22] The patient should be recalled at six-month intervals after this point has been reached, for a barium swallow to check the area of stenosis.

Cardiospasm (Achalasia).—This is a fascinating disease in which there is tremendous dilatation of the thoracic esophagus of insidious onset due to long delay in opening of the hiatal closing mechanism. No conclusive contributions have been made in recent years which would clarify understanding of the cause of the condition. Alvarez many years ago suggested a simple cause of the dysfunction. He felt that an absence of ganglion cells between the coats of the esophageal muscle is a common finding. This, however, would indicate previous toxicity, relatively severe, that is not always substantiated in the history.

A recent survey of this entity showed it to occur in about one case in 3,000 clinic patients, equally divided in the sexes, occurring in the third or fourth decade, abruptly in some, insidiously in others. The most common symptoms are[24]:

1. regurgitation of ingested food
2. sensation of food sticking as it reached the lower end of the esophagus, mostly solids, but in 50 per cent both solids and liquids, and of the latter, cold more than hot
3. pain or discomfort between throat and upper abdomen (less marked in well-established cases)

As indicated, the cause is not clear and associated carcinoma is uncommon.[5] In about 50 per cent it followed surgical procedures. An attempt to explain its etiology is further complicated by the lack of unanimity relative to the presence of a sphincter at the esophago-gastric junction. Some experimental observations on patients with cardiospasm[17] indicate that as a group they are dour, humorless, wary, suspicious, noncommital and defensive. In short, in their attitudes and behaviour they are ruminative, and rumination is suggested by their esophageal dysfunction. Various attempts experimentally on the clinical level fail to show that the cause may be Vitamin-B lack. Cardiospasm is not, morever, a manifestation of beriberi.

The diagnosis is made by esophagoscopy and esophagrams.

To review esophageal peristalsis briefly: true primary waves of esophageal peristalsis initiate in

the pharynx and pass along the esophagus propelling the food bolus. The cardia relaxes with the approach and reflex stimulation of this wave. In cardiospasm these are absent and segmental waves, non-peristaltic in type, are present. These are called tertiary waves. These may actually be seen in the elderly without cardiospasm. However, in the typical cardiospasm case the primary wave, under the fluoroscope, will be seen to end at the suprasternal notch and below this segmental (tertiary) waves begin with cessation of progressive peristalsis and barium passing upward and downward without purpose. Primary waves do not return even with clinical improvement of symptoms. In many cases an apparently adequate esophageal channel exists in the cardiac area. The difficulty lies in the absence of rhythm and regularity in its opening. Right oblique x-rays in most patients will define the point of constriction. In about 55 per cent the obstruction is above the diaphragm; 28 per cent at the level of the diaphragm and about 15 per cent below the left leaf of the diaphragm.

The chief differential is carcinoma.

The complications of cardiospasm are multitudinous; regurgitation pneumonitis, basal pneumonitis, lung abscess, pleural effusion and bronchiectasis may complicate. Fifty per cent will have chronic respiratory symptoms, such as cough, dyspnea, chills and fever. A fair number complain of asthma and hay fever.

The majority have a fairly marked weight loss.

Regurgitation of blood rarely occurs and tarry stools are rare; about half are constipated. Anemia in an insignificant finding. There is no consistent relationship to body types or to the use of alcohol or tobacco.

Until recently medical treatment has been of no value and the patient was dependent for relief upon either dilatation or surgery. The recent method of Balfour and Wharton[1] shows considerable promise in a number of cases. A paste made with a dram of 2 per cent procaine and a dram of metmucil in 2 to 3 ounces of water, is given one-half hour a.c., t.i.d. The effect lasts one and one-half to two hours. This program is followed for four to six weeks and has produced relief of symptoms, although not always a change in the x-ray.

Of those not responding to the above medical treatment, the majority show satisfactory results with dilatation using the mercury filled dilators of Hurst or others such as the mercury filled pneumatic bag of Browne-McHardy, or hydrostatic dilators. There is an ever present danger of rupture of the esophagus and diaphragm, but this is rare. Most require over five dilatations. About one-third experience moderate to severe chest pain with dilatation. The period of relief varies from hours to weeks or months. A satisfactory result means only slight dysphagia not interfering with effective swallowing.

Surgical treatment is indicated only when medical treatment or dilatation, which is about 85 per cent effective,[2,3] fails. Operation does not restore primary waves but is done essentially to relieve the terminal obstruction. The procedures used are: esophagogastrostomy, cardioplasty, and extramucous esophagocardiomyotomy, similar to Ramstedt's operation for infantile pyloric stenosis which is currently achieving popular favor. Hoover[4] reports seven cases in which cardiectomy with removal of some portion of the stomach and esophagus has been carried out for "the relief of a benign condition, stricture, fibrosis or cardiospasm" with good results.

Using the Hurst bougies dilatation is begun by passage prior to each meal, the interval lengthened as the symptoms improve, and omitted with the symptoms completely relieved. Hurst recommends leaving the bougie in place for fifteen minutes. The ability of the patient himself to manage these recommends them highly.

Diverticulum.—The diverticulæ of the esophagus have been classed pulsion, traction and congenital. By virtue of the degree of protrusion they are classed true or false. If all layers of the wall are involved it is a true type; if but part, then a false diverticulum. They are usually true and rarely congenital although a congenital weakness is probable.

Diverticulum of the hypopharynx really should be considered as a different problem than that of diverticulum of the esophagus. It is a false (Zenker's) type of deformity composed of mucosa and submucosa herniating through the zone of the junction of the pharynx and esophagus and through the triangular space bounded by the fibers of the cricopharyngeal muscle and the inferior constrictor of the pharynx. The position of the sac may be in the midline or, usually, to the left between the two muscles.

Various methods for the division of the partition between the pouch and esophagus, the inversion, transplantation or rotation of the sac without removal have been found to be unsafe or unsatis-

factory and should not be used.[11] Resection of the sac by the one stage operation has proven to be safe and effective in eradication of the condition.

Patients with this type deformity present themselves with progressive dysphagia, regurgitation, belching and pressure in the neck. Many of them have cough or excess saliva, and complain of choking and gurgling sensations in the neck. It is predominantly a disease of males between the third and sixth decades. Tumor is prominent in some and may produce hoarseness and a Horner's syndrome. Inanition may develop from obstruction in the absence of infection.

The diagnosis is made by esophagrams.

The thoracic esophagus is the site of the traction type and there is frequently the history of tuberculous adenitis, mediastinitis, adhesions and finally the formation of a tent-like diverticulum with a wide neck and a narrow everted fundus. The diverticulæ vary in shape but the neck and fundus are usually of the same size or nearly so. They are generally found in the elderly. X-rays are best taken in the left oblique position. These are first seen as the bolus passes. A small amount of barium remains for a brief period at the defective spot. The important thing is whether or not they retain barium very long. If they do, they are potentially dangerous. The symptoms are usually mild and rarely justify thoracotomy. The chief complaint is of pain behind the sternum or in the back or in the epigastrium, although many are without symptoms of any kind.

Congenital Stenosis.—Congenital stenosis of the esophagus is rarely a distinct entity. The most common malformation is obstruction, the lower end of the esophagus[10] communicating with the trachea at the bifurcation.

Complete stenosis is not compatible with life, usually, although gastrostomy and repeated procedures to establish drainage of the upper esophagus externally and modern methods of reconstructive plastic surgery may offer some help.

Congenital Artresia with Tracheo-Esophageal-Fistula.—This is a condition now meriting more consideration since the successful work of Leven[11] and Ladd[10] in 1939. Ladd gives five possible anomalous forms:

1. the upper esophageal segment ends in a blind pouch in the upper third and the lower esophagus segment is represented by a similar blind pouch.

2. the upper esophageal segment communicates with the trachea and the lower segment is a blind pouch.

3. the upper segment terminates blindly and the lower segment is in communication with the trachea above the carina.

4. this is similar to three except that the lower segment communicates with the trachea and the carina and the right or left main bronchus.

5. both segments communicate with the trachea.

From a practical standpoint about 75.12 per cent find the upper esophageal segment ending blindly and a lower segment communicating with the tracheobronchial tree by means of a fistulous tract.

The diagnosis is suggested by increased oral secretions, regurgitation and attacks of cyanosis. Diagnosis is established by passing a small catheter into the esophagus and failing to meet the stomach. Under fluoroscopy, 1 cc. of lipiodol is instilled into the catheter demonstrating the upper segment with or without the tracheoesophageal fistula. During and between swallowing under fluoroscopy the inferior level of the upper esophageal segment is noted. Then the lipiodol should be aspirated. The chest and abdomen should be x-rayed to determine the pulmonary status, the presence or absence of gas in the gastrointestinal tract and possibly reveal other anomalies. Gas in the gastrointestinal tract is usually indicative of a fistula.

Needless to say, definitive surgery, obliteration of the fistula and establishing a passage to the stomach is the only treatment.

Esophageal Varices.—Varices occur in cases of Banti's disease and in association with other maladies. They are obstructive, producing symptoms when they are large. The veins of this region are a part of the anastomosis between the portal system and the vena cava. Any obstruction to the portal or caval circulation naturally causes back pressure and varices are enormous. Thinning of the walls may cause hematemesis or fatal hemorrhages.

Esophagoscopy, carefully and gently done—as it always should be—will establish the diagnosis. If in a quiescent stage an esophagram will give the characteristic "beaded" appearance near the hiatus. If asociated with cirrhosis, liver function tests will be positive.

Treatment in hemorrhage is by bismuth subnitrate given dry on the tongue, 4 gm. every hour

for three doses, then less frequently. Rest and transfusion are usually essential. Of recent vogue is the use of balloon tamponade in the management of the hemorrhagic episode. The results of this type of therapy ore not yet well evaluated but offer considerable promise. Morphine should not be used because of its nauseating properties.

This manifestation of esophageal disease is a serious problem in areas where Manson's schistosomasis is endemic. This disease kills one of four patients with bleeding from esophageal varices. Esophagoscopic injection of sclerosing solutions to obliterate the varices has been reported[14] to be a life-saving measure. Using 5 per cent sodium morrhuate and injecting 1.5 cc. at intervals of a few days seems well tolerated and prognostically is more effective than splenectomy, although it is not unattended by the danger of severe hemorrhage.

The surgical measures such as the portal-caval shunt in the management of cirrhosis seem to offer some hope. Packing of the mediastinum, modifications of the "Ech" fistula for cirrhosis and ligating of the hepatic artery have been insufficiently tested to evaluate.

Scleroderma.—Diffuse scleroderma has as sites of predilection the limbs, face, and upper body. The face may become masklike and expressionless, and the hands assume a clawlike appearance. There are respiratory and swallowing disturbances. From studies of patients with the disease[9] about 50 per cent complain of dysphagia. All patients in which the esophagus was examined with barium under fluoroscopy, dilatation with absent peristalsis was noted in three of four of them. In a fourth case peristalsis was absent and there was stasis, but the calibre of the lumen was normal.

Treatment of this symptom in scleroderma is symtomatic and consists of the administration of PABA or, more recently, ACTH and Cortisone.

Plummer-Vinson Syndrome.—Sir Arthur Hurst[6] states he was the first to label upper dysphagia with anemia "Plummer-Vinson syndrome" because of Vinson's paper in 1922 referring to the unpublished work of Plummer in 1914. However, he feels now more appropriate is the "upper dysphagia with anemia syndrome of Paterson." This is also commonly designated as the sideropenic anemia with dysphagia. It occurs in 15 per cent of the simple hypochromic anemias as a disease of women between the ages of thirty and fifty and is due to iron deficiency. It causes anemia and atrophy of the mucous membrane of the tongue and pharynx, and results in loss of sensibility so that the afferent side of the reflex, upon which the second stage of swallowing depends, is impaired. Termed by Vinson[34] "the only true type of hysterical dysphagia," fear of choking interferes with normal swallowing and an unbalanced diet leads to secondary anemia, splenomegaly and nutritional changes of the mucous membrane of the tongue and corners of the mouth.

The differential diagnosis of this relatively rare disease from functional dysphagia is quite simple. The latter is lacking in atrophic changes in the pharynx and anemia is not necessarily a part of the syndrome, and it is essentially a syndrome of a younger age group with many situational anxiety problems. There are numerous reports in which a provisional diagnosis of Plummer-Vinson syndrome has not been substantiated by esophagoscopy. The findings in many cases are those of upper esophageal web formation.[30]

There is a high frequency of carcinoma occurring at the esophageal introitus, in cases of Plummer-Vinson syndrome.[28] Simpson,[26] in discussing it as a precancerous condition reported carcinoma developed in ten of eighteen patients with this syndrome.

Treatment of this syndrome is the treatment of the iron-deficiency anemia by replacement therapy, following substantiation of the diagnosis by esophagram, esophagoscopy and blood counts.

Angioneurotic Edema, et cetera.—Angioneurotic edema, urticaria, serum diseases and herpetic lesions are all known to produce dysphagia in some cases. In some they will produce complete esophageal obstruction.[7] Along with the dysphagia there may be a complaint of painful swallowing (odynophagia) and retrosternal or mid-back pain.

After the history of an allergic type response is obtained, diagnosis is made by esophagoscopy.

Our management of these syndromes, now more effective than in the past, is by the use of antibiotics, intramuscular or intravenous antihistamines, and, more recently, by ACTH.

II. Functional Dysphagia

Globus Hystericus.—Globus hystericus, as we chose to label functional dysphagia, is the most common finding in the average case presenting it-

self to the clinic with the complaint "difficulty in swallowing." On taking an unhurried and sympathetic history, however, their story becomes one of a "lump in my throat that won't come up or won't go down." This complaint, however, is only constant with saliva and is almost always relieved by swallowing liquids or food. For this reason the patient is usually well-nourished and may actually have gained in weight since the onset of this symptom, since eating gives him relief. It shows a high degree of predilection for those whose daily duties allow them little expression and compel them to accept a high degree of abuse. They live, as Walden puts it, in a state of quiet desperation. Beauty shop operators, salesladies and housewives, admittedly dominated and unhappy, rank high in this group.

As noted previously, this must be differentiated from Plummer-Vinson syndrome. In most cases, reassurance and psychotherapy in the form of a sympathetic ear will resolve the syndrome. If cancerphobia or other neurotic elements are prominent, esophagrams and esophagoscopy are frequently employed to substantiate the clinical reassurance that cancer is not in the throat.

III. Extrinsic Causes

Hiatal Hernia.—Esophageal hiatal hernia and the problem of the congenitally short esophagus, their incidence and management, is most ably reviewed by Olsen and Harrington[19]:

Of their 220 cases, 141, or 64 per cent, were males, and seventy-nine, or 36 per cent, females. Only 11.8 per cent were under forty years of age. The largest number, seventy-two, were in the fifty to fifty-nine age group, although sixty-three or 28.6 per cent were in the sixty to sixty-nine group.

The symptoms most commonly present in their series were:

1.	dysphagia	165 or 75	per cent
2.	substernal distress	71 or 32	per cent
3.	esophageal pain	20 or 9	per cent
4.	hemorrhage	18 or 8	per cent
5.	asymptomatic	17 or about 8	per cent

Other conclusions they reached in their study were, summarily, (a) The true congenital short esophagus is rare but the acquired short esophagus of later life is not so rare.

(b) Congenital enlargement of the esophageal hiatus and atrophy or weakening of the diaphragmatico-esophageal membrane are basic to development of hiatal hernia. (c) Peptic ulceration of the esophagus will result in its shortening. This may result from excess vomiting or an incompetent sphincter. (d) Dysphagia is the most common symptom of the short esophagus. In its early stages spasm is present. Organic stenosis of the esophagus develops later. (e) Hiatal hernia of the short esophagus type is not favorable for surgical repair, but does respond well to medical management and esophageal dilatation.

Since the hernia of the normal esophagus is amenable to surgery careful differentiation is important, and is dependent upon careful x-ray and esophagoscopic study. The x-ray diagnosis of hiatus hernia is based on the exact location of the esophagogastric junction above the diaphragm or the recognition of a sacculous protrusion of the cardia above the diaphragm. The examination is best conducted with the patient rotated obliquely with the right side forward about 30 degrees while drinking thick barium. The demonstration is more apparent with the stomach full and the patient in Trendelenberg.

Medical treatment is directed toward symptoms due to the mechanical nature of the hernia.[25] The nature and cause of his condition is carefully explained to the patient. He is advised to avoid coarse, rough foods; to masticate properly and slowly; to eat frequent small meals, and not to lie down for at least an hour post sibum. Nocturnal eating is discouraged. Sleeping with the head well elevated may avoid sleeping problems. Antacids, antispasmodics and sedatives are useful.

Surgical care should offer a complete cure but most authors agree it is seldom necessary. It is a formidable procedure for an older age group. Surgery is perhaps best indicated for patients who have had repeated serious bleeding, for patients who are seriously disabled by pain or other symptoms not responding to medical treatment, for those in whom symptoms and signs may be confused with associated or complicating conditions in the region of the hernia which of themselves require surgical treatment. The results of surgical correction are uniformly reported as good.[27]

Aberrant Vessels.—Dysphagia due to unusually placed vessels is necessarily rare. Dysphagia lusoria, that due to an abnormally placed right subclavian artery, is the only one distinguished by a name. However, the aortic ring type and the mitroaortic in which a band surrounds either or both the mitral and aortic orifices are recognized.

Dysphagia, rather than cyanosis, may be outstanding and may be recognized by the rapid malnutrition of an infant. This may not appear until the infant is begun on solid and semi-solid food. Some of the food passes down but some stays in the pharynx or overflows. The child may make several attempts to swallow, then refuse.

Diagnosis is made by x-ray and cardiac catheterization.

A barium swallow will outline an indentation in the posterior wall of the esophagus, and injection of lipiodal into the trachea shows constriction of the anterior lower portion. Roentgen examination is essential to differentiate the condition from a mediastinal tumor or cyst.

The types of vascular anomalies encountered[2] are:

1. Double aortic arch produced by bifurcation of the ascending aorta. One limb passes anterior to the trachea, the other behind the esophagus. Both, then, are enclosed in a vascular ring which may narrow the lumen.
2. Right aortic arch associated with a left ligamentum arteriosum may form a ring compressing trachea and esophagus. Division of the latter relieves the compression.
3. Aberrant subclavian artery that branches from the distal part of the aortic arch instead of from the innominate artery. Ligation and division is the management.

Outside Pressure.—The most frequent lesions are:

1. Goiter, cervical or thoracic
2. Intra-thoracic tumor
3. Aneurysm
4. Cardiac or aortic enlargement
5. Hodgkins, or other adenopathies, et cetera
6. Lordosis
7. Enlargement of the left hepatic lobe

The treatment rests on the degree of involvement. Usually medical management with careful dilatation is adequate, if compression impairs nutrition. Diagnosis must be attained with the aid of x-rays, biopsy and esophagoscopy, except in aortic aneurysms. Laryngeal paralysis due to compression on the left laryngeal nerve may be associated, as in a recent case seen by us in which the first symptom presented by a teen-aged boy was dysphagia with liquids, followed by left laryngeal paralysis which brought him to the clinic because of his weak voice. X-rays revealed a large mediastinal mass, later proven to be a lymphoma.

IV. Inflammatory Lesions

Esophagitis.—In either the acute or chronic type of esophagitis, dysphagia is considerable. There will be a sudden onset of this symptom if due to trauma or ingestion of a severe irritant due to the edema which is produced. It will persist until the edema has receded. The patient may complain of painful swallowing, pain in the chest, have accompanying symptoms of lower intestinal involvement. While the esophagus remains the enigma of the intestinal tract, it is becoming more apparent that symptoms once thought to be reflex from peptic ulcer, et cetera, may well be incident to esophageal inflammation *per se*. Substernal discomfort, belching, heartburn, sense of fullness in the chest, et cetera, are being noted as related to small discrete lesions by the endoscopist. Smears or biopsy of the ulcerations found at esophagoscopy will differentiate it from malignancy and identification of the organisms facilitate its resolution by antibiotics.

In the acute phase, aside from specific antibiotics, the bismuth marshmallow for children and the bismuth subcarbonate powder for adults seems the best management. The latter is given in gram doses every three to four hours. Antacids, antispasmodics and a bland diet are symptomatic medications.

Following the acute stage and a symptom-free period, a chronic esophagitis may ensue. Since this pathology, if not halted, results in fibrosis and/or stricture formation, dilatations may become a necessity.

Tuberculosis.—Tuberculosis is an extremely rare primary lesion. The secondary type is diagnosed by smears, cultures and biopsy. Treatment is general, not local.

Syphilis.—Syphilis, too, is a rare inflammation but may be manifested in primary, secondary, or tertiary lesions. It is diagnosed not by Wassermann but by biopsy. Treatment is general.

V. Neurological Lesions

Myasthenia Gravis.—Myasthenia gravis is a somewhat rare disease, still not definitely described as to morbid anatomy, characterized by a weak-

ness of muscular action due to excessive or pathologic fatigue. Dysphagia is a prominent symptom and the presenting symptom in 20 per cent of the cases. One of the more common diagnostic signs is the so-called "vallecular sign." It implies the retention of barium in the valleculae and in the pyriform sinuses at the time barium visualization of the esophagus is being done. The standard treatment in this disease has been the use of 15 mg. tablets of prostigmine bromide. Surgery, in the last ten years, has offered some promise. At Massachusetts General Hospital, Viets[32] reports thirty-six patients subjected to thymectomy. Seven had thymomas, and twenty-nine showed various degrees of involution and the formation of germinal centers in the thymic tissue. Patients are adequately maintained on oral neostigmine, prior to surgery, and intravenous neostigmine at surgery. Viets concludes that the results justify the continuation of the operation and that the mortality should be close to zero if patients are well selected and maintained during surgery.

Jugular Foramen Syndrome.—The jugular foramen syndrome, first described in the French literature in the early 1900's, is one of involvement of the last three or four cranial nerves. In 1917, Villaret used the term "The syndrome of the retroparotid space" a syndrome of homolateral paralytic association of larynx, soft palate, tongue and muscles of the neck, particularly the sternocleidomastoid and trapezius.

A similar syndrome may result from accident or gunshot wound, and surgical correction, if the seventh nerve is not involved, has been described.[16]

The jugular foramen syndrome may, in fact, be caused by any tumefaction near the jugular foramen but in our series, and in a recent revision of pathological diagnoses, the glomus jugulare tumor is not a rare cause of vagal disturbances manifested in part by dysphagia. The surgical treatment of this extremely vascular tumor is risky and difficult. Its response to irradiation therapy is not too clear.

Multiple Sclerosis.—Multiple sclerosis is characteristically irregular in its symptom syndrome and dysphagia is an incidental and infrequent symptom.

Progressive Bulbar Palsy.—Progressive bulbar palsy (progressive-glosso-pharyngolabial) is an uncommon disease of later life with a lower motor neuron symptom complex and associated atrophy of the muscles of the tongue, lips, jaws, larynx, and pharynx. It ends fatally and no known treatment is effective.

Pseudobulbar palsy presents the same symptom syndrome as does the previous disease but there is no associated atrophy.

Acute Poliomyelitis, Bulbar Type.—Acute poliomyelitis, bulbar type, quickly presents a child who is having increasing dysphagia, nasal voice and the accumulation of saliva and mucus in the throat. Attempts to drink fluids causes coughing and choking. These symptoms are usually followed by coma, respiratory arrest, et cetera. The use of the respirator, early tracheotomy and supportive care are important.

Thrombosis of the Posterior-Inferior Cerebellar Artery.—Thrombosis of the posterior-inferior cerebellar artery is an uncommon condition characterized by hemi-ataxia of the homolateral limbs plus loss of sensibility to pain, heat and cold on the contralateral side. This produces a definite but temporary dysphagia.

It seems in order here to note that a difficult problem may present in the newborn because of neuromuscular incoordination. Symptoms of tracheo-esophageal fistula in a newborn not corroborated by the radiologist may be due to temporary and partial bulbar palsy. Forceps delivery and prolonged second stage of labor may suggest this possibility. The child will swallow poorly, regurgitate, aspirate, and be moderately cyanotic.

Evidence in the literature earlier suggests that immaturity of the medullary centers may be responsible.[13]

Other Diffuse Central Inflammations of CVA's.—Serious infections which have marked central nervous system disturbances and produce dysphagia are, of course, important by virtue of their primary nature. The feeding problems incident to them are well-known and treatment well standardized.

Summary

An attempt has been made to assemble all the data necessary for the physician to make a differential diagnosis on dysphagia. Prevailing surgical procedures and medical management are outlined.

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The Problems and Management of the Fractured Hip

By Harry R. Custer, M.D.
Columbus, Ohio
and
Clifford W. Brainard, M.D., F.A.C.S.
Battle Creek, Michigan

FOR THE past fifteen years most orthopedic and traumatic surgeons have agreed that open reduction with internal fixation is the treatment of choice for the elderly patient with a fractured hip. There are still a few orthopedic surgeons who prefer to use well-leg traction, Roger-Anderson's pins or the Whitman abduction method with plaster of paris spica, as therapy for the debilitated person. It is their belief that such people will not tolerate the trauma of surgery.

The primary purpose of this paper is to present the problems and management of the fractured hip in the elderly patient, who is not only debilitated but is also a so-called poor surgical risk. The following series will show that this type of patient is best handled by early open reduction with internal fixation, along with early discharge to their own home and family.

Obviously, the preferred treatment is that method which provides the best answers to the problems which are common to all cases of hip fractures in the debilitated geriatric patient. First, it is the duty of the surgeon to provide maximum comfort and relief of pain to these people. This is accomplished by immediate proper traction and early open reduction with internal fixation of the fracture. It is important to minimize senile psychosis and degeneration. To that end, it is imperative to reassure the patient that he will return home to his family within a few days and that he will be able to walk again. It goes without saying, that we are obliged to minimize morbidity and mortality, to obtain bony union and good functional results as well as decreasing the economic burden to the patient and the patient's family. It is also necessary to prevent the complications to which these patients are prone, including decubitus ulcers, vascular changes, stiffness and contractures of the knee, thrombosis, and pneumonia. These problems are best answered by early open reduction with internal fixation along with early discharge to home.

As soon as the patient with a fractured hip is admitted to our hospital, a complete history is taken and a thorough physical examination performed. Immediate therapy of associated disease is begun. In our series the most prevalent diseases were rheumatoid arthritis, diabetes mellitus, cardiac decompensation, bronchiectasis, cerebral arteriosclerosis, emaciation, cystitis, and hemiplegia. It is necessary to prevent prolonged preoperative preparation of the patient. Our observation showed that most of these patients began to deteriorate after forty-eight hours. Thus, we operate upon all fractured hips within two days unless there are some definite contraindications.

All patients are put in Russell's traction upon hospitalization. Russell's traction pulls down with abduction and is comfortable. It will reduce most fractured hips within twenty-four hours. It is to be noted that the position of the foot in Russell's traction is not a true indication of the position of the fracture. Perineal palsy is prevented by adequate padding of the hammock. An indwelling catheter is inserted in most cases to prevent bed soiling and bladder distention.

Preoperatively our patients receive morphine, gr. 1/8, or codeine, gr. 1, along with atropine, gr. 1/200. All of our patients receive avertin as a basal anesthetic. The amount is indirectly proportional to the patient's age and physical condition. Generally, a sixty-year-old patient receives 60 mg. of avertin per kilogram of body weight, whereas a seventy-year-old patient receives only 55 mg. per kilogram of body weight. Using this dosage, avertin is a safe and effective basal anesthetic for the geriatric patient. It is supplemented by nitrous oxide and oxygen. The younger patients occasionally receive ether. Deep anesthesia is not necessary or indicated for the elderly patient with a fractured hip, and we have had no anesthetic complications or deaths using this regime.

The patient is placed gently on an orthopedic table. The patient is horizontal with the leg in light traction, moderately forceful internal rotation, slight hip flexion and gentle abduction. This secures the best reduction except for certain types of intertrochanteric fractures. A preoperative x-ray of the hip is taken. We have minimized the time needed to obtain the radiograms, by having well

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trained technicians utilizing hot developing solutions in a darkroom adjacent to the operating room.

Generally the type of internal fixation which is most desirable can be determined before the incision is made. In most neck fractures, and the majority of poor risk patients, or bedfast patients, a Smith-Petersen nail is used. In other patients with intertrochanteric fractures, we have utilized a Jewett, Neufled or McLaughlin nail. • The Moe plate with transfixion screws is used when the fracture is severely comminuted.

One of the most important factors in operating upon the debilitated geriatric patient is to avoid unwarranted prolongation of anesthesia, shock and surgical trauma. This is accomplished by administering intravenous fluids and blood, but most of all, by the co-operation of a well-trained surgical team.

The surgeon must determine the individual angle of the neck which is done by x-ray, manual palpation, and direct visualization, if necessary. One must be sure that impaction is complete and that anatomical reduction is good. This position is held by leaving two guide wires in place until fixation by the nail is secured. The proper length nail can be determined by the x-ray of uniform guide wires of constant length. In most instances, the proper position of the nail is so that lateral x-ray view shows the nail through the center of the neck and in the lower part of the neck in the anteroposterior view, and placed not closer than 1 cm. to the articular surface of the femoral head. Other positions predispose to coxa vera and later perforation of the femoral head.

The next group of problems concern themselves with the prophylaxis of postoperative complications. Morbidity has been definitely reduced by the routine administration of penicillin for the first three postoperative days. Postoperative shock is prevented by using a minimum of preoperative medication, anesthesia, and operating time, along with the gentle handling of the patient. Overhydration is avoided by giving no saline the first forty-eight hours and giving only 500 cc. of intravenous fluids at one time, and never to exceed 2,000 cc. in twenty-four hours. It is necessary to educate the nursing staff so that nursing errors such as the twisting of the leg, causing external rotation, along with possible injuries to the spine or hip, can be avoided. Drug idiosyncracies must be kept in mind when the patient exhibits postoperative psychosis. We also routinely allow most patients to be taken about the floor in a wheel chair on the second or third postoperative day. It is also helpful to allow the geriatric patient to return to his lifelong habits as soon as desired. The patients are encouraged to eat a high protein, high vitamin diet. We discharge the patient as soon as practical, and it is our feeling that the elderly patient does better in his own home with his own family. Expenses, as well as nursing care, are a real problem in the hospital.

The last group of problems to be considered are the delayed complications including coxa vera, hip and low back pain, migration of the nail or fragments, and delayed union.

Coxa vera cannot be entirely eliminated. It is usually due to absorption at the fracture site or the comminution of the fracture with upward progress of the trochanter and fragments. Coxa vera can be minimized by obtaining good impaction; the proper placing of a nail which will not bend, and by forbidding early ambulation.

Hip pain is a common complication following open reduction with internal fixation. Among the common causes of hip pain are aseptic necrosis, medial migration of the nail, and arthritic changes.

Aseptic necrosis will always occur where the blood supply has been destroyed at the time of injury. Postoperative aseptic necrosis is to be suspected in patients who have groin pain during the first few days after surgery. It is our impression that the incidence of aseptic necrosis is higher in those patients who had a Moreira nail fixation. We believe that the Moreira nail causes increased destruction of the blood supply to the neck of the femur, and that this type of fixation allows for rotation of the femoral head after bone absorption. We agree with other authors that early ambulation predisposes to aseptic necrosis. Therefore, we allow no ambulation for three months and no weight bearing for four months, or until the x-ray shows good callus formation.

Medial migration of the nail is not preventable when it is attached to the femoral shaft. It is due to bone absorption at the fracture line, and must be taken into consideration when the nail is inserted. If the hip remains painful, the nail may be removed, after adequate callus formation. Bone absorption is also responsible for medial migration of the distal fragment. Some orthopedic surgeons believe that the Moreira nail prevents this complication.

The incidence of delayed union can be decreased by securing good impaction and anatomical reduction. It is also important to avoid early ambulation and weight bearing by the injured hip.

Following hip fractures many patients develop a clinical shortening of the affected leg. Usually it is minimal and is compensated by a tilt of the pelvis. If the condition is responsible for back pain, an orthopedic shoe with an elevated heel may be prescribed.

There will always remain some patients with a painful hip, that cannot be explained by x-ray. Occasionally a patient is sensitive to the metal and removal of the nail will give relief.

The following statistical report concerns 225 private patients with fractured hips who were treated by open reduction with internal fixation at the Leila Y. Post Montgomery Hospital in Battle Creek, Michigan, between 1946 and 1952.

The preoperative and postoperative care, as well as the surgery, was performed by our orthopedic surgical team which includes the resident staff. Thirty-six per cent of the entire series were operated upon by the surgical residents under the personal supervision of the attending orthopedic surgeons.

The age of the patients varied from twenty-eight to ninety-nine with an average age of seventy-three. Nine patients were under fifty years of age. Of these nine, seven received fractured hips as a result of automobile accidents. There were forty-two men, or 18.2 per cent, and 183 women, or 81.8 per cent.

Two patients had advanced rheumatoid arthritis, seven had diabetes mellitus, thirty-seven had cardiac decompensation, two had marked bronchiectasis, twelve had advanced cerebral arteriosclerosis, and ten were hemiplegics. Therefore, it is quite obvious that many were geriatric patients who were a so-called poor surgical risk. Only one patient was not considered surgical. She was eighty-four years old and was admitted with terminal pneumonia. She expired four days after hospitalization and is not included in this series.

The type of injury is of some interest. One patient jumped from the second floor of a burning house. Seven were in auto accidents, eight fell down the stairs, and 209 had simple falls with torsion. Of these patients, 118, or 56.9 per cent, had an intertrochanteric fracture, that is, a fracture located from the extracapsular portion of the neck to a point 5 cm. below the lesser trochanter. One hundred and seven, or 43.1 per cent, had a neck fracture.

The time from injury to surgery varied from nineteen hours to twelve days with an average time of 1.6 days. The patients with prolonged preoperative hospitalization were mostly the patients in automobile accidents who had multiple fractures and were considered critical for several days.

All patients were immediately put in Russell's traction. Avertin was given as a basal anesthetic in every case. The length of the surgical procedure varied from thirteen to 140 minutes with an average time of sixty-five minutes. The types of fixation were as follows: Moreira nail, thirty-two; McLaughlin nail, five; Jewett nail, thirty-five; Neufeld nail, fifty-seven; Moe plate with transfixion screws, two; Smith-Petersen nail, ninety-eight, three of which were with associated plates and seventeen were used in intertrochanteric fractures in bedfast or poor risk patients.

The postoperative morbidity as measured by an elevated temperature was from zero to six days with an average of 1.8 days. The length of hospitalization was from three to sixty days with an average of 9.2 days. One patient had a severely comminuted fracture which was impossible to reduce. She was in the hospital twenty-eight days. Four patients with multiple traumatic fractures were hospitalized sixty, twenty-seven, twenty-three, and twenty-five days, respectively. Excluding these five cases, the average length of hospitalization was 8.2 days.

In this series there was no hospital mortality. One hundred and eighty-seven or 83 per cent lived past the eight-week period, and fifty-six, or 25 per cent, were bedfast. We are positive that 100 per cent had less pain, senile psychosis, morbidity, mortality, and were a greatly decreased nursing and economic burden to their family. Office and clinical follow-up showed an estimated 20 to 33 per cent minimal coxa vera and a 5 per cent functional coxa vera. Only one hip was not reducible and two had a painful hip due to metal sensitivity. Aseptic necrosis appeared in 12 per cent of the neck fractures and four of those had Moreira nail fixation and early ambulation.

In conclusion, we desire to stress two points: (1) early open reduction with internal fixation is the treatment of choice for the debilitated geriatric patient with a fractured hip. (2) Morbidity and mortality are reduced by avoiding prolonged surgical procedures and hospitalization.

Delivery of Thoracopagus Twins

By Harvey C. Bodmer, M.D.

Kalamazoo, Michigan

THORACOPAGUS twins are an obstetrical rarity, particularly in the hospital of a small community. A pair of thoracopagus twins was delivered by Cesarean section at Borgess Hospital, Kalamazoo, Michigan, on March 11, 1952.

Case History

Case 150999.—M. B., aged nineteen, presented herself for only one prenatal visit late in the third trimester. The findings of the abdominal examination raised the question of twins. X-rays to confirm the diagnosis were suggested, but the patient refused. This was her second pregnancy, the first being an uneventful delivery of a normal child when she was sixteen. Her health had been good since that time. There was one set of normal twins in the family—born to an aunt of the patient's husband. There were no other multiple pregnancies on either side of the family.

The next contact with the patient was on her admission about 10:30 p.m. on March 10, 1952. She was actively in labor, 3 cm. dilated, with a double footling presentation. Hydramnios was present. The cervix became dilated to 8 cm. after two hours of moderately severe labor. The membranes were ruptured artificially and delivery was attempted. The delivery proceeded normally until the anterior double footling reached the bitrochanteric level of the fetus. At this point all progress stopped. A vaginal examination was done because of the hydraminos and the unusual findings on abdominal palpation. Examination of the anterior presenting twin, which was now in an OP position, revealed no umbilical union. The fetus did not present a head as expected. Upon re-examination of the sacral area of the anterior presenting fetus, arms and legs were found in their normal relationship. Examination of the abdominal side revealed a single umbilicus and umbilical cord, and it was possible to identify the approximate structure and position of a mouth. This later proved to be a harelip and cleft palate. The single umbilicus of the thoracopagus union had not been found on the first examination since the union extended further down than the umbilicus. Consultation with Dr. Frederick C. Ryan, Chief of Obstetrics, Borgess Hospital, was requested at this time, and the diagnosis of multiple birth and monstrosity was agreed upon. It was decided to deliver the patient by Cesarean section.

The parts already delivered, i.e., the lower buttocks and feet of the anterior presenting fetus, were sterilized and a classical section was done. A dead multiple thoracopagus twin pregnancy was delivered. The total weight was 11 pounds, 8 ounces. The anterior fetus was slightly larger, while the smaller or posterior fetus had a cleft palate, harelip and bilateral club feet (Figs. 1 and 2).

There was a considerable amount of jaundice-like stain on the mother's abdomen after delivery. The urine was tested for bile and porphyrins. The results were negative.



Fig. 1.

An autopsy was refused, but the placenta was sent to the pathology laboratory for examination. It was considered normal in shape and size with a battle-door implantation. It weighed one and one-half pounds.

Recovery was uneventful and the patient left the hospital on the fifth day.

Discussion

Thoracopagus twins, by definition, are twins joined in the chest by union extending from the approximate angle of Louis to the region of the umbilicus. The Greek word "pagus" indicates the union of the two pregnancies and the word "thoraco" indicates the location of this union. Such twins are classified by Patten as double monsters.[10] The incidence of this type of delivery is rare. In Cook County there was one case in 80,000 deliveries; and in New York Jewish Memorial Hospital there was one case in 11,970 deliveries.[11]

In the discussion of multiple births, it is interesting to note that there is a ratio of approximately 1 to 86 in the United States. In Great Britain the ratio is 1 to 80.[8] However, the incidence is less frequent in the Mongoloid races. The Japanese ratio is 1 to 145. Multiple deformities occur in a ratio

of 1 to 20,000-50,000 births. It is also interesting to note that the incidence of malformations is higher in the white race than in negroes, according to Murphy and Potter.[12] According to the work of



Fig. 2.

Newman, there are six to seven times as many stillbirths among monozygomatic twins as there are in single deliveries.[9]

The theoretical causes of these deformities are based largely on experiments done on fish. Landauer demonstrated that the number of deformities increased with the contamination of food or any exposure to insecticides containing selenium.[7] The possibility of manganese deficiencies was brought out by Caskey and Norris.[1] Werber showed the influence of bituric acid or acetone in double monsters.[13] Intercurrent infections as a cause of these deformities have been suggested.[5] Radiation may be a cause. However, in reviewing the history of this patient, nothing could be found that might have had an influence on this case and the cause of this double monstrosity, monozygotic pregnancy, remains unknown.

In multiple pregnancies the average gestation period is 255 days. According to the most accurate estimate possible in this case, the patient was due on April 15, but she delivered on March 11, after active labor. The weight, 11 pounds, 8 ounces, was slightly over the average of 5 pounds for each deformed fetus.

A case was reported in Florida in 1949 in which an antepartum diagnosis by routine x-ray was made and which resulted in an elective Cesarean.[4] However, the mortality of the double monstrosity in ten minutes and twenty-five minutes, respectively, gave no better results than a later diagnosis. In our opinion, to deliver a double monstrosity from below would be determined primarily by the location of the union.

The posterior cephalic delivery in the classical case of Chang and Eng, the original Siamese twins, was made possible by the sacral location of the union and its elasticity.[2] An anterior breech delivery is another possibility, but when the pagus is located in the flank, delivery from below is practical only by mutilation or when the fetus is extremely small. In a case reviewed and reported from Loma Linda, the delivery was accomplished only after mutilation and some evisceration.[3] Double decapitation, amputation at the pelvis and some evisceration was necessary in a case reported from Mombasa in Africa.[6]

In conclusion, the author feels that the diagnosis of a double monstrosity with an unknown union must depend largely on antepartum x-ray and on vaginal examination during active labor. Because of the high fetal mortality in this type of case, even under the most successful conditions, the condition of the mother is worth consideration. The Cesarean section is recommended in order to enhance her recovery and to reduce the morbidity and possible postpartum complications.

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Large Dermoid Cyst of Ovary Obstructing Birth Canal as a Complication of Pregnancy

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Munising, Michigan

THE purpose of this presentation is twofold. First, it disproves the adage that, "once a caesarian, always a caesarian," provided, of course, that the indication for the first section can be subsequently eliminated. Secondly, it emphasizes the importance of routine prenatal vaginal examination. Failure to make this examination would have proved rather embarrasing in this patient at the time of delivery, of the two pregnancies to be described.

Case 1.—Mrs. V. W., aged twenty-six, mother of one child six years old, presented herself in February, 1947, with the history that she believed she was about three months pregnant. Her first child was delivered vaginally without difficulty, and in the ensuing six years she had not been pregnant despite the fact that she had never used contraceptives. Physical examination was essentially negative except for the findings in the pelvis. A bimanual vaginal examination revealed an enlarged soft uterus about the size of a three months pregnancy, and in the pelvis was found a large, fixed mass, which was hard in one portion, and had a cystic character in the remaining portion. The impression was that the mass was an ovarian cyst which would render vaginal delivery impossible. The finding was explained to the patient, and surgery was recommended with the warning that the operative procedure might precipitate an abortion. As an alternative, it was suggested that an elective caesarian could be done and the mass investigated at the time of section. Since she was anxious to have a live baby, she chose to submit to a caesarian section.

On August 19, 1947, a classical cæsarian section was performed, and at operation a large cyst of the right ovary was found to be free and was removed. It was envisioned then that the cystic ovary that was felt at the first prenatal examination had risen out of the pelvis as the uterus enlarged in the ensuing months. The postoperative course was uneventful.

The patient was next seen on April 25, 1952, and she stated that her last menstrual period began on Dec. 19, 1951. Examination revealed no abnormalities except for the pelvis. The uterus was enlarged to just below the umbilicus, and bimanual vaginal examination revealed the presence of the same mass in the pelvis, as was found five years previously. It was apparent that the interpretation of the free cystic ovary that was found at cæsarian section was erroneous. Since it was believed that at this stage of pregnancy, the placenta had taken over the function of corpus luteum of pregnancy, it was recommended that pelvic laparotomy be performed, and if the pelvic obstruction could be removed, vaginal delivery would be possible. On this occasion the patient was not too concerned with the possibility that surgery might precipitate a miscarriage, and she consented to submit to surgery.

On May 7, 1952, a laparotomy was performed, and when the pregnant uterus was displaced anteriorly, a large cyst of the left ovary was found to occupy the entire true pelvis. It was bound to the pelvic walls by numerous broad but fairly thin adhesions. The mass was delivered out of the pelvis with only slight difficulty, and it was removed along with the fallopian tube. When the mass was opened it was found to contain vast quantities of sebaceous material and hair. The hard portion felt on vaginal examination proved to be a hard palate from which protruded one small tooth. The postoperative course was uneventful, as was the ensuing prenatal period. She volunteered the information that she felt better than she had in the past six years, in that she was not plagued with severe constipation. Since the mass had compressed the rectum, the reason for her sense of well being becomes obvious.

At 1:30 a. m. on Sept. 28, 1952, the patient delivered spontaneously a 6½ pound boy in OLA position after eight hours of labor. A median episiotomy was performed.

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DELIVERY OF THORACOPAGUS TWINS

(Continued from Page 201)

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Detroit Physiological Society

MEETINGS OF OCTOBER 16, 1952, AND NOVEMBER 20, 1952

The Growth and Cytopathogenic Effects of Viruses in Tissue Culture Fibroblasts

C. S. Stulberg, Ruth Schapira, and
C. Richard Eidam
The Child Research Center of Michigan

The growth patterns and cytological effects of strains of influenza A virus and herpes simplex virus were studied in cultures of fibroblasts derived from different tissues of the chick embryo. Group B Coxsackie virus was studied in fibroblasts developed from tissues of infant mice. Influenza virus failed to multiply in fibroblasts isolated from the lung, heart, skeletal muscle or cornea tissue of chick embryos, but did multiply in lung and cornea tissues when cells carried over from the embryo tissues were present. Cytopathogenic effects of the virus were not observed. Herpes simplex virus grew well in fibroblasts isolated from lung, skeletal muscle, and heart tissues of the chick embryo. With the propagation of herpes simplex virus, destruction of cells occurred until few normal cells remained and virus production ceased. The results with cultured tissues conform closely with the capacities of these viruses to multiply in specific cells and tissues of the chick embryo itself. Group B Coxsackie virus multiplied in fibroblasts isolated from the interscapular fat pads of infant mice, paralleled by a progressive cytopathogenic effect which continued until nearly all fibroblasts were destroyed.

The Initiation of Blood Coagulation in Hemophilia

Shirley A. Johnson and Charles L. Schneider
Wayne University Medical School

In the clotting of blood, prothrombin may be converted to the active enzyme thrombin through the action of thromboplastin and other accelerators. In extravascular clotting of shed blood, thromboplastin comes from the surrounding tissue, but the origin of a thromboplastin-like activity for clotting within vessels has not been elucidated.

Since it has been shown in this laboratory and elsewhere that platelets contain little or no thromboplastin it was important to determine what they do contribute. Platelet extract with a plasma globulin was found by Milstone to activate purified prothrombin in the presence of calcium ions. This observation has been confirmed and extended. It has been found that both platelet extract and the plasma globulin (platelet co-factor) must be present together to produce prothrombin activation. The platelet extract and plasma globulin can again be separated and neither one, by itself, can then activate purified prothrombin.

Early investigators suggested that hemophilia was essentially not a deficiency of the blood platelets but instead a condition concerned with a lack of a plasma component. This could be the platelet co-factor mentioned above.

In our assay, diluted hemophilic plasma would *not* activate purified prothrombin as rapidly as an equal amount of similarly treated normal plasma. The *amount* of thrombin produced by hemophilic and normal plasma was the same. However, the rate of prothrombin conversion to thrombin was slower when hemophilic plasma was tested. The rate of prothrombin conversion could be increased when hemophilic plasma was mixed with a partially purified preparation of the platelet co-factor from plasma. A transfusion of normal plasma also enabled the hemophilic plasma to activate purified prothrombin more rapidly.

Sterilization of Arterial Homografts

Ralph E. Carlson, Peter C. Trafas, and
Conrad R. Lam
Henry Ford Hospital

It would be desirable if blood vessel material obtained at routine autopsies (and consequently unsterile) could be sterilized to kill bacteria and viruses without denaturing the tissue so that it would not function as a homograft. The agent diacetylethylene (DAE), which has been tried as a virucidal material in plasma, was investigated

first. Sections of the aortas of donor animals were contaminated with virulent cultures and stored for varying periods after decontamination with DAE. Storage was carried out in an ordinary refrigerator with the grafts suspended in modified Tyrode's solution. When the grafts were implanted in the abdominal aortas of recipient animals within five days of decontamination, all of the animals died of hemorrhage from breakdown of the suture lines. In segments implanted later, there was a high incidence of thrombosis and degenerative changes in the grafts.

In a second series, the agent betapropiolactone was used to decontaminate the grafts. Preliminary results indicate that this substance is a reliable antibacterial agent and preliminary results indicate that no adverse effects have been produced on the graft material.

Reactions and Modifications of Some Blood Proteins Connected with Coagulation

L. Lorand
University of Leeds, England, and Wayne University

Recent studies on blood proteins threw light on some of the clotting reactions.

Fibrin-Stabilizing-Factor.—The physiologically formed plasma clot is insoluble in 30 per cent (w/v) urea in which fibrin obtained by the action of purified thrombin on purified fibrinogen easily dissolves. This reveals that the internal network structure of the two clots is different. In fibrin the particles are linked together by secondary forces, but in plasma clot, they are bound more strongly. The sequence of clot formation: fibrinogen, urea-soluble fibrin, urea-insoluble plasma clot resembles the keratinization of the skin protein, epidermin, as described by Rudall. In addition to Ca-ions, a thermolabile component of the serum: fibrin-stabilizing factor is essential in the production of a urea-insoluble plasma clot. In collaboration with Dr. Kekwick we purified the fibrin-stabilizing factor and it was found that the factor separates with globulin P-fraction in the low temperature-ether fractionating scheme.

Fibrino-peptide.—The comparison of the N-terminal residues of fibrinogen and fibrin, and the study of nitrogen partition during clotting showed that an acidic peptide, called fibrino-peptide, is split off from fibrinogen by thrombin. The transition of fibrinogen to fibrin follows the example of the pepsinogen-pepsin or ovalbumin-plakalbumin transformation inasmuch as in all three cases the primary protein is converted into a new protein species by loss of a peptide. This kind of reaction may be a common pattern in the biogenesis of a number of proteins. Fibrino-peptide has been isolated in an apparently pure form and its molecular constitution has been studied.

Mechanical Heart Blood Pressure Patterns Which Permit Direct Visualization of the Mitral Valve in the Living Animals

Robert A. Gerisch, M.D.; F. Dewey Dodrill, M.D.; Edward Hill, M.D., and Aran S. Johnson, M.D.
Harper Hospital

The normal arterial pressure pattern is due chiefly to ventricular ejection. Were it not for the energy imparted by ventricles to the fluid vascular compartment, the blood pressure in the arteries would soon be dissipated. Therefore, by analyzing blood pressure patterns we learn more about the amount of work which the ventricles in the living animal are doing. Even though blood pressure is affected by other factors, such as blood viscosity, peripheral resistance, blood vessel distensibility, et cetera, the primary source of energy is derived from the ventricles. Just as the arteries have pressure patterns characteristic of arteries, so do the ventricles exhibit their own characteristic pressure pattern.

With the same technique we use to record "heart pressure" patterns in animals, other pumps can also be tested for their characteristic pressure patterns.

Our studies have been concerned with the temporary substitution of a mechanical pump to do the work of (1) the "right" heart, (2) the "left" heart and (3) both right and left sides of the heart, so that the part of the heart which is bypassed can be opened for direct vision surgery.

By recording simultaneously the mechanical heart pump pressure pattern, the aortic pressure

(Continued on Page 207)

"So Much for So Little"

There are many things scientific or socio-economic in nature that one could comment about in this state of flux in which Medicine now finds itself. But this one time I seem constrained, due in part to our immediate Past-President Beck's immense interest and effort in the Beaumont Memorial, aided by the constant work of Drs. A. H. Whittaker and W. J. Jones, to urge every member of our Society to do his share in preserving this monument to Medicine.

A large share of the cost of this project has been donated and its completion is now assured, but allow me to predict there will not be one member who will not be proud to say he has shared in this gift to the public commemorating one of the important events of all medical history. Talk to your non-medical friends and observe their enthusiasm for such a public-spirited enterprise undertaken by Medicine. Think for a moment how many dollars you have spent foolishly during the last year; yet this is a "buy" in which you cannot be disappointed. The average donation is approximately eleven dollars. I believe there is not a member of our group who couldn't afford a gift of one dollar upward to enable him to indulge in the pride of doing something in the public interest redounding to his own credit. I am sure you will never be able to get "so much for so little."

President's Message



R. J. Hubbell

President, Michigan
State Medical Society

Editorial

THE BEAUMONT MEMORIAL

THE MICHIGAN State Medical Society is happy to devote this number of THE JOURNAL to the Beaumont Memorial project. That shrine and its proper preservation has been a major objective for many years, and now is within reach. President Otto Beck has devoted a great part of his time and energy, during his term in office and since, to conclude this endeavor. The land was purchased some time ago through the generosity of Parke, Davis & Co. Extensive research has been conducted by Prof. Emil Lorch, and designs made for an exact reproduction of the original Fur Company Store.

Hopefully, this shrine will represent the Medical Doctors of Michigan. A great number have joined in the enterprise, and sufficient money is on hand to warrant starting construction. Additional funds are needed, however, and it is hoped a greater number of our members will join. This memorial is promised perpetual care and maintenance, so it will be an enduring proof of medical progress.

If you have not yet sent your check, please do so now. Don't wait and forget.

HEALTH CARE OF THE NATION

THERE HAS BEEN agitation among many groups of people for two decades or more looking toward supplying medical and hospital care to *all* the people of the nation. Demands were made which spelled socialized medicine. Government claimed that the responsibility for complete distribution of health services must be assumed by the medical profession, else government would step in and furnish the services itself. Numerous bills were introduced in the Federal Congress, to which the profession objected.

The Doctors of Medicine in Michigan, becoming tired of always opposing legislation or fighting aggression all the time, decided to do something tangible. We evolved our Michigan Medical Service and its kindred organization, Michigan Hospital Service. These are voluntary non-profit prepayment health service groups. Anyone (at first only in groups), who wishes, may provide for his medical and hospital services by voluntary prepayment. He may spend his money on other things, but if he chooses to buy health care, it is available on a voluntary basis, with free choice of physician or hospital. At first, Michigan Medical Service gave full coverage—home, office, hospital, but the cost due to adverse utilization was prohibitive, and finally medical service in hospital only was adopted.

This was an outstanding Michigan accomplishment.

During one of the hearings recently conducted by the President's Commission on the Health Needs of the Nation, a proposal made by speakers from Michigan, which was released to the press on October 30, 1952, was seized upon by the Federal Security Administrator and publicized widely. This plan is the American Federation of Medical Centers, Inc., and claims to be a new type of national medical care program under private operation. Briefly "the plan provides complete hospital, medical, surgical and dental care to individuals at a cost of one to two dollars a week, varying by communities. Communities will be shown how to establish medical centers, giving them all the advantages of great national medical centers, right in their own home town."

"The American Federation of Medical Centers, Inc., has formulated a program which includes the following primary recommendations: (1) The banding together of community leaders to provide new medical centers which will permit physicians and other professional personnel to work at maximum efficiency. (2) The establishing of community centers to make available to the public, under one roof, a group practice program of preventive as well as curative medicine, conducted by a balanced team of general practitioners, specialists, dentists, nurses and other technicians. (3) The offering to the community of a program of modern medical care, financed by a system of voluntary prepayment available to all sections of the population.

"We believe we have the fully documented answer to the demand for an overall plan by which in a reasonable time, and at a reasonable cost, everyone can have the medical care he requires, and for which he can pay. . . . Under group insurance coverage, the cost for complete health protection, according to the American Federation Medical Centers plan, is not expected to exceed the amount now paid by the average person, or paid by others in his behalf."

The federation is a non-profit organization, founded by Edgar H. Norris, M.D., former Dean of Wayne University Medical School. This is another plan developed in Michigan, but sounds to us quite similar to several plans already in operation—The Permanente organization and the Ross-Loos Clinic, in California. The fundamental objection to both is that their plan is group practice, simply, operating with all the staff on salaries. We recognize the fact that other famous clinics have salaried arrangements, but they do not give health care on the insurance basis.

The third plan for the health care of the nation has just been reported by The President's Commission on the Health Needs of the Nation. This report is not yet available for study, and specific comments will be withheld. Sufficient now is the mention of point 4 which reads, "Funds collected through the OASI (Old Age and Survivors Insurance) mechanism may be utilized to purchase personal health service benefits on a prepayment basis for beneficiaries of that insurance group, under a plan which meets Federal standards, and which does not involve a means test."

While not saying so, this means *compulsory national health insurance,* which the medical profession, the people and the Congress have repeatedly turned down. There is also a suggestion that the existing voluntary, non-profit health plans be subsidized to an extent which might reach a billion dollars to make the services available to beneficiaries of federal and local aid.

This question of subsidy has been shunned by the voluntary plans since their inception, because of fear of losing their independence. This fear was justified by the Federal Supreme Court when it ruled that anything the Federal Government subsidizes, it shall control.

We await the Magnuson Commission's report, and promise adequate and considered study, but we must at present withhold support. This report and its usages will concern the next Administration, not Harry S. Truman who has always favored the socialized approach.

Under private enterprise, individual and group accomplishments, a very satisfactory health care program has been created and has been subscribed to by much over half of the population of the nation, and this entirely without governmental or bureaucratic help. It has been demonstrated that success may be obtained in spite of bureaucratic opposition, and a worthwhile health care be given to all who wish it. The evidence of success of this program is the constantly increasing improvement of health and mortality records during the life of these plans.

DETROIT PHYSIOLOGICAL SOCIETY

Mechanical Heart Blood Pressure Patterns

(Continued from Page 204)

pattern, and the electrocardiogram, one can see when the aortic pressure pattern is completely replaced by the "mechanical heart" pressure pattern. When only the "mechanical heart" pressure pattern is seen in the aorta, then no blood is being ejected from the ventricle, and the heart can be opened for mitral valve examination without hemorrhage.

Laboratory Evaluation of Antiepileptic Agents

Graham Chen and Charles R. Ensor
Parke, Davis and Company

A number of antiepileptic drugs (the derivatives of barbituric acid, hydantoin, succinimide, oxazolidone, and amides) were chosen for study of their anticonvulsant activities in laboratory animals. A fair agreement was found between their suppressive effect in Metrazol and electrically induced convulsions and their efficacy in the management of petit mal and grand mal epilepsy.

Phenobarbital and pentobarbital (or barbital) were shown to differ in their anticonvulsant properties in that only the former possesses at non-hypnotic levels an antielectroshock action similar to that of Dilantin.

The relationship between chemical constitution and anticonvulsant activity was investigated with the hydantoin, succinimide, and the oxazolidone derivatives. The presence of the lower alkyl members at the carbon atom in the ring increases the anti-Metrazol potency of these compounds, but exerts only a very slight influence on their antielectroshock activity. The reverse is the case with the phenyl radicals. An increase in both anti-Metrazol and antielectroshock activities is achieved by the introduction of an alkyl and a phenyl group at the same carbon atom.

Michigan's Department of Health

Albert E. Heustis, M.D., Commissioner

PHYSICIAN URGENTLY NEEDED ON BEAVER ISLAND

What is undoubtedly one of the unique medical practices in the country—the position of physician on Michigan's historic little Beaver Island—is vacant and is urgently in need of an interested applicant. Since the retirement of Dr. R. E. Palmer in September, the Island's 500 year-around residents have been without medical service. The coming of winter has made their situation serious.

Beaver Island is a part of Charlevoix County, lying in northern Lake Michigan, 35 miles from the mainland. It has a year-around population of 500 persons, with a summer influx of an additional 1,500 to 2,000. Boat service is frequent during the open-water season but from December through April communication is only by telephone, plane or sled.

Since 1923, when the Island residents appealed to Governor Groesbeck for help in keeping a physician in year-around residence, the Legislature has made a regular appropriation for a "Beaver Island Physician." As a matter of bookkeeping procedure, the item has been attached to the Michigan Department of Health budget, carried as a separate account.

The position is under State Civil Service and the state employes' retirement system. The salary range is $5808 to $6576, plus all fees collected. The previous incumbent had a contract to care for local Coast Guard personnel that amounted to $300 a year. A Michigan license is required.

The Beaver Island opening offers a challenge to service reminiscent of frontier days. Dr. A. E. Heustis will welcome inquiries from any physician interested and will be glad to furnish additional information.

INTOXIMETER TEST RESULTS ADMITTED AS EVIDENCE

In a recent court case in southeastern Michigan involving a man charged with driving under the influence of intoxicating liquor, the results of an Intoximeter test were admitted as evidence by the judge, over objection.

The Intoximeter is a readily portable device about 3 inches in diameter and 10 inches long which measures alcohol circulating in the blood, by means of an analysis of the breath. The admissibility of results of the test as evidence in court cases has been a matter of legal controversy.

MORE ABOUT SALMONELLA MONTEVIDEO

As a sequel to the recent shipment into the state of a powdered egg yolk product found to be contaminated with Salmonella Montevideo, identification of the organism has been made in four cases of Salmonella infection in children. In each of the four cases, the egg yolk product had been used.

COMMISSIONER'S YEARLY SUMMARY HIGHLIGHTS ACCOMPLISHMENTS

"Summing Up for 1952" is the title of the expanded December issue of the Department's monthly bulletin, *Michigan's Health*, outlining major activities for the year.

The Division of Laboratories performed approximately 1,307,200 diagnostic tests through the Lansing, Grand Rapids, Houghton and Powers laboratories, highest work load total in their history.

An estimated 3,657,500 doses of serums and vaccines were distributed to physicians and health officers, also a record total. These were produced in the laboratories at Lansing.

Continued investigation work on the bacteriology of infant diarrhea has shown that E. coli 111, B_4 and 55 are undoubtedly two of the infectious agents responsible for diarrhea of the newborn. Feeding experiments with adult human volunteers have shown that E. coli 111, B_4 and 55 are capable of causing gastro-enteritis when administered in sufficient quantities.

The Laboratories' Blood Plasma Program continued at an accelerated pace in the collection and fractionation of blood. The program is providing blood plasma, albumin, immune serum globulin, antihemophilic globulin and resuspended cells to sixty-five counties in Michigan.

Department mobile X-ray units screened approximately 205,630 persons for tuberculosis in community case-finding surveys.

Over 130,000 school children were screened for hearing loss in co-operative programs during the school year. Seventy practicing otologists have co-operated in medical examinations of children discovered to have hearing loss.

Industrial Health Division engineers made 3,927 visits to plants employing 498,885 workers. Nearly 90 per cent of recommendations were carried out.

Approximately 300,000 vital records were processed during the year, bringing the total on file in the Department's vaults close to 13,000,000.

To local health departments and individuals, the Department supplied nearly 1,000,000 pamphlets and 600,000 persons saw motion picture films from the Department's loan library.

HEALTH OFFICERS APPOINTED

Alfred L. Wood, M.D., has been appointed director of the Dearborn City Health Department.

Gerald W. Behan, M.D., has been appointed director of the Grand Traverse-Leelanau District Health Department.

There is no substitute for cystoscopic examination and biopsy in the diagnosis of vesical neoplasms.

* * *

A cystoscopically invisible but symptomatic vesical neoplasm is a rarity.

* * *

Despite the great mass of research done on therapy of leukemia in recent years and the plethora of new treatments introduced, the fact remains that it is still impossible to cure leukemia or even to alter drastically the course of the disease.

* * *

Acute leukemia in adults is refractory to chemotherapy.

* * *

The principal toxic manifestation of the antifolic compounds is gastrointestinal disturbances with ulceration, bleeding and diarrhea.

* * *

For chronic leukemia, irradiation remains the treatment of choice, no chemotherapeutic agent having been proved to have better effects.



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The remarkable relief afforded by Dramamine in motion sickness has led to studies of its possible value in allied conditions.

Dramamine apparently depresses hyperstimulation of the vestibular apparatus. Thus it is an effective means of relieving the nausea and vertigo which characterize dysfunctions of the middle ear.

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VESTIBULAR DYSFUNCTION associated with
- streptomycin therapy

VERTIGO in
- Ménière's syndrome
- hypertensive disease
- fenestration procedures
- labyrinthitis
- radiation sickness

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In Memoriam

HAROLD DE BLOIS BARSS, M.D., of Ypsilanti, died December 7, 1952, at the age of sixty-six.

During the past thirty-three years, he had served the community of Ypsilanti as a surgeon. Dr. Barss was graduated from the University of Michigan Medical School in 1914. Following his graduation, he served on the surgical staff of University Hospital, Ann Arbor, from 1914 until 1918.

Dr. Barss had served on the Ypsilanti Board of Education from 1933 until 1938. He was a member of the Washtenaw County Medical Society and a Fellow of the American College of Surgeons.

He was a staff surgeon at St. Joseph Mercy Hospital, Ann Arbor. During World War II, Dr. Barss was a member of the Civil Air Patrol.

Dr. Barss is survived by his wife, a daughter, Mrs. Barbara L. Graham, and a son, William A. Barss, M.D., of Ypsilanti. He also leaves his mother, Mrs. W. E. Witter, of Rochester, N. Y., and two brothers, Howard P. Barss, of Portland, Oregon, and Alden F. Barss, of Vancouver, B. C.

PETER BUHRMAN, M.D., of Ann Arbor, died November 29, 1952, at the age of twenty-eight.

Dr. Buhrman was graduated from the Wayne University College of Medicine in 1949 and interned at St. Joseph's Mercy Hospital, Ann Arbor. He had just finished two years of service in the Air Force Medical Corps and was to return to St. Joseph's at Ann Arbor December 1, 1952, to finish his residency training.

He was an associate member of the Michigan State Medical Society.

MARIA BELLE COOLIDGE, M.D., of Detroit, died December 26, 1952, at the age of seventy-eight.

Dr. Coolidge, who had practiced medicine in Detroit for the past forty-five years, was the first woman surgeon in the Army Medical Reserve Corps. During World War I, she was the first doctor of medicine of her sex to attain the rank of first lieutenant in the medical corps. She served in France during World War I.

Dr. Coolidge was graduated from the Cincinnati Medical College in 1907. She was a member of the Wayne County Medical Society and a life member of the Michigan State Medical Society.

Dr. Coolidge is survived by a brother, The Rev. John K. Coolidge, of Euclid, Ohio; and a sister, Mrs. Frank W. Coolidge, of Detroit.

HUGO A. FREUND, M.D., of Detroit, died December 24, 1952, at the age of seventy-one.

For the past forty-five years, he had served Detroit as a doctor of medicine with a primary interest in internal medicine. Dr. Freund was also a civic leader in Detroit for many decades. He was graduated from the University of Michigan Medical School in 1905. He remained at the University Hospital for two years following his graduation as an assistant instructor of internal medicine. He came to Detroit in 1907 to begin his practice. He took postgraduate studies in Germany in 1911 and 1912.

He became a member of the Harper Hospital staff in 1909, and in 1927 was named Chief of Internal Medicine at Harper Hospital, a post he held until 1945. At the time of his death, he was senior consultant of internal medicine at Harper Hospital and consultant at Receiving and Children's Hospitals and at Haven Sanitarium. He was also a member of the Board of Trustees of the proposed Oakland County Hospital. Dr. Freund was to

(Continued on Page 212)

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Powered to meet every radiographic requirement of general practice.

It provides radiography and fluoroscopy in both horizontal and vertical positions with easy change from horizontal fluoroscopy to horizontal radiography, or vice versa, without moving patient from table.

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Potassium Guaiacolsulfonate	169 mg.
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in a raspberry flavored syrup.

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Histussin is recommended for cough due to colds, allergic bronchitis, catarrhal bronchitis and other conditions that stimulate the cough reflex.

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Necessary for Nitrogen Balance

Good dietary practice admits of an optimum protein intake of about 100 grams per day with a minimum of not less than 1 gram per kilo of body weight. At least half of the protein should be of first class biologic value, the remainder furnished in a readily assimilable form the 14 or more synthesizable amino acids necessary for nitrogen balance.

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1 Schoenheimer, R., Ratner, S., and Rittenberg, D., J. Biol. Chem., 127:333, 1939 and 130:703, 1939.

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All Protein No Sugar

HUGO A. FREUND

(Continued from Page 210)

have been Director of Research at the new Mt. Sinai Hospital which opened in Detroit a few days after his death.

Long noted as a civic leader, Dr. Freund was a member of the City Welfare Commission from 1936 to 1940 and was a member of the Detroit Board of Health from 1917 to 1930. Dr. Freund became a trustee of the Children's Fund of Michigan, an activity sponsored by the late Senator James Couzens, and served from 1929 until his death. He was re-elected president of the Fund year after year. Since 1951, he had been president of the Child Research Center.

Besides being a member of the Wayne County Medical Society, he was a Life Member of the Michigan State Medical Society, a Diplomate of the American Board of Internal Medicine, a member of the American Association of Pathologists and Bacteriologists, the Central Society for Clinical Research, a Fellow of the American College of Physicians, and a past president and director of the Michigan Chapter of the Arthritis and Rheumatism Association.

During World War I, he served as a captain in the Medical Officers Reserve Corps.

Dr. Freund is survived by his wife, Ruth; two daughters, Mrs. Barnett Malbin, of Detroit, nad Mrs. Edgar Alexander, of Evansville, Indiana. He also leaves a son, Richard A. Freund, of Birmingham, and six grandchildren.

JAMES L. HENDERSON, M.D., of Detroit, died December 5, 1952, at the age of sixty-six.

Dr. Henderson was graduated from the Detroit College of Medicine in 1914 and interned at Parkside Hospital, Detroit. He was an obstetrician.

Dr. Henderson was on the staff of Parkside and St. Francis Hospitals, Detroit. He also taught pediatrics and obstetrics at the Nurses Training School, Dunbar Memorial Hospital, Detroit. He was medical director of Mercy Hall Hospital.

Dr. Henderson was a member of the Wayne County Medical Society and a Hamtramck Councilman from 1922 to 1924.

He is survived by his wife, Edna, and three children. They are Langston, James, and Mrs. Ruth Bouier. He also leaves two brothers and two sisters.

FRANK J. HODOSKI-HODGES, M.D., of Detroit, died December 13, 1952, at the age of fifty-two.

He had practiced in Detroit for the past twenty-four years and was primarily interested in internal medicine. Dr. Hodges was graduated from Ohio State University College of Medicine in 1928 and interned at Receiving Hospital, Detroit, in 1929.

He was on the staff of Grace and Chenik Hospitals, Detroit.

Dr. Hodges is survived by his wife, Allie; three children, Donald, Janet, and Carol; three brothers and three sisters.

WILLIAM Y. KENNEDY, M.D., of Detroit, died December 28, 1952, at the age of sixty-two.

Dr. Kennedy was graduated from the Detroit College of Medicine in 1913 and joined his late father, J. B. Kennedy, M.D., in the practice of medicine. Dr. Kennedy had been on the staff of Grace Hospital for nearly forty years.

Dr. Kennedy was an industrial surgeon and for many years had been surgeon for the D&C Navigation Company.

He was a member of the Wayne County Medical Society and the American Association of Industrial Physicians and Surgeons.

Dr. Kennedy is survived by his wife, Gertrude, and three sons, William Y. Kennedy, Jr., Johnston B. Kennedy, and Pfc. Fred J. Kennedy. He also leaves two brothers, Charles S. Kennedy, M.D., and Fred J. Kennedy, both of Detroit.

EARL W. MAY, M.D., Detroit, died December 16, 1952, at the age of sixty-one.

He was graduated from the Detroit College of Medicine in 1916 and interned at Grace Hospital, Detroit.

Dr. May retired from active practice in 1945 due to illness but prior to that had served as Chief of Pediatrics at Grace Hospital for fifteen years and was Consulting Pediatrician at Herman Kiefer Hospital, Detroit. He was also an instructor in pediatrics at Wayne University College of Medicine. For several years he served as Director of Child Welfare of the Detroit Health Department.

During World War I, he served as a transport surgeon.

Dr. May is survived by his wife, Evelyn; a daughter, Mrs. Carol M. Hollingshead; a son, Donald G. May, M.D., of Kalamazoo, and a sister, Helen E. May.

ALFRED E. VAN NEST, M.D., of Detroit, died December 9, 1952, at the age of fifty-seven.

He was graduated from St. Louis School of Medicine in 1918. Dr. Van Nest served his internship at Providence and St. Luke's Hospitals in St. Louis, Missouri. Before coming to Detroit in 1920, Dr. Van Nest, a surgeon, did postgraduate work at the Chicago College of Surgery.

He was a member of the staff of Detroit Memorial and St. John's Hospitals.

Dr. Van Nest is survived by his wife, Helen, and four daughters. They are Mrs. John Parshem, Mrs. John Varty, Mrs. John Marley and Mrs. George Seeger, of Detroit. He also leaves a brother, Edward, of Jackson.

ROBERT J. PALMER, M.D., of Detroit, died December 2, 1952, at the age of seventy-seven.

Dr. Palmer, formerly the chief surgeon at Grace Hospital, Detroit, studied medicine at the University of Toronto and in London, England, and Edinburgh, Scotland. He received his medical degree in 1899.

He was a member of the executive committee of Grace Hospital for twenty-five years. An Emeritus Member of the Michigan State Medical Society since 1950, he was also a member of the Wayne County Medical Society and a Fellow of the American College of Surgeons.

Dr. Palmer is survived by his wife, Emma; a daughter, Mrs. Edward S. Lambrecht, of Grosse Pointe; a sister, Mrs. F. H. Hayhurst of Toronto, and four grandchildren.

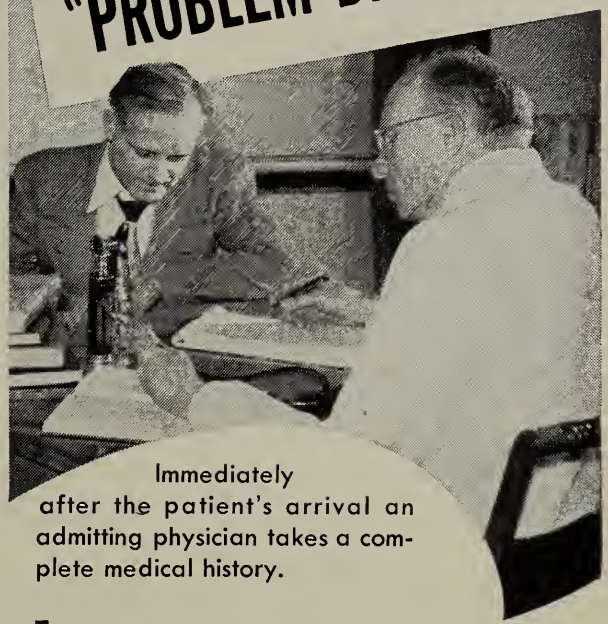
W. CLARE SKINNER, M.D., of Detroit, died November 23, 1952, at the age of sixty.

Dr. Skinner, who was graduated from the University of Michigan Medical School in 1919, served his internship at Harper Hospital, Detroit. He was on the staff of Mt. Carmel Mercy Hospital, Detroit.

He was interested in industrial medicine and was a member of the American Academy of General Practice, and the Wayne County Medical Society.

Dr. Skinner is survived by his wife, Ruth; a daughter, Mrs. DeRhua Swears, of Tokyo, Japan, and six grandsons.

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MICHIGAN AUTHORS

R. M. Nesbit, M.D., and **W. C. Baum, M.D.,** of Ann Arbor, Michigan, are the authors of an article, "Antibiotic and Chemotherapeutic Agents in Infections of the Genitourinary Tract," published in *The Journal of the American Medical Association,* December 13, 1952.

H. M. Pollard, M.D.; R. J. Bolt, M.D.; H. K. Ransom, M.D., and **J. E. Orebaugh, M.D.,** of Ann Arbor, are the authors of an article, "Comparison of Results of Vagotomy and Subtotal Gastrectomy for Duodenal Ulcer," published in *The Journal of the American Medical Association,* December 13, 1952.

C. C. Sturgis, M.D., of Ann Arbor, is the author of an article, "Some Aspects of the Leukemia Problem," published in *The Journal of the American Medical Association,* December 20, 1952.

E. H. Steffensen, M.D., of Detroit, is the author of an article, "Corticotropin, Cortisone, and Hydrocortisone in Treatment of Ocular Disease," published in *The Journal of the American Medical Association,* December 27, 1952.

Von Hermann Pinkus, M.D., of Monroe, is the author of an article, "Bullous Variety of Incontinentia Pigmenti (Bloch-Sulzberger)," published in the *Archives of Dermatology and Syphilology,* May, 1952.

Von Hermann Pinkus, M.D., of Monroe is the author of an article, "Granuloma faciale," published in *Dermatologica* (International Journal of Dermatology, Basel, Switz.) Vol. 105, No. 2, 1952.

* * *

"To a Better Living."—The editorial from THE JOURNAL for October bearing the above caption was quoted on the Editorial Page of the *Journal of the West Virginia Medical Society* for December, 1952.

* * *

Correction: In the November THE JOURNAL, in the editorial reporting the elections, four words "of Michigan Medical Service" were inadvertently omitted in the third paragraph, second column, on page 1464, at the end of the second line. The sentence should read "During the session of the Michigan State Medical Society elections to the Board of Directors of Michigan Medical Service were held." The list of officers which follows are those of Michigan Medical Service, not Michigan State Medical Society.

* * *

Gifts to the American Medical Education Foundation are deductible in income tax reports. They are given official recognition in *The Journal of the American Medical Association* and in THE JOURNAL OF THE MICHIGAN STATE MEDICAL SOCIETY. The MSMS Council urges full support of this very constructive program, one that will prove that aid to medical education need not come from Federal sources and that our medical schools can remain free of Governmental domination (socialized education).

* * *

"The Story of Cancer for High Schools," a brochure prepared by the MSMS Cancer Control Committee and published through the help of the Michigan Department of Health, is being distributed to all public and parochial high schools of Michigan. Copies have been sent to the Secretary of every component county society in this State. Whenever called upon for talks or other cancer education assistance by the high schools, your members now have a worthy publication to use; they are urged to participate in this important educational activity. (This marks another important "FIRST" for Michigan).

* * *

Medical Civil Defense Information.—The county medical society is the logical unit for dissemination of this important information to the M.D.'s of the State. The MSMS Emergency Medical Service Committee requests county medical societies to set aside proper time necessary to make their membership aware of plans and basic principles of the medical aspects of civil defense. For a speaker to appear before your county society on this subject, write William Henry Gordon, M.D., Chairman, Emergency Medical Service Committee, c/o Box 539, Lansing 3. *(Atomic Energy-Civil Defense* will be featured in a talk by Paul Aebersold, Ph.D., of Oak Ridge, Tennessee, on Wednesday, March 11, at 8:30 p.m., Grand Ballroom, Sheraton-Cadillac Hotel, Detroit —during the 1953 Michigan Clinical Institute.)

* * *

Health Group Award Winners.—Winners of the annual awards sponsored by the Michigan Health Council were announced by Dr. J. S. De Tar, council president.

The Dearborn Health Council was named to receive the Andrew S. Brunk award for the outstanding community health council program for 1952. The council was cited for an aggressive job done in promoting a series of community health projects.

An award for the outstanding news story on community health activity went to Gretchen Reinhardt of the *South Macomb News,* East Detroit, for her story on the Center Line Health Council's Well Baby Clinic.

The Hale Health Council of Iosco County was named

(Continued on Page 216)

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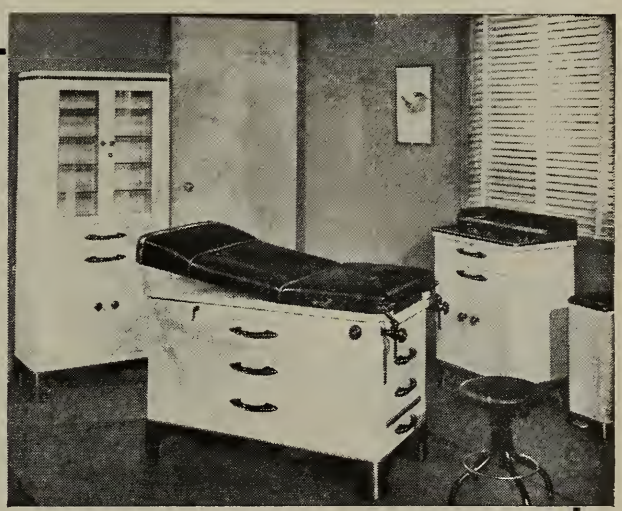
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(Continued from Page 214)

the award winner among community health councils whose programs are less than a year old.

A special award for public health workers performing service beyond the line of duty went to Ruth Tappan, a registered nurse with the Calhoun County Health Department.

The awards were presented at the banquet program of the sixth annual Michigan Rural Health Conference at Michigan State College, January 16 and 17, 1953.

* * *

March of Dimes Nurse Recruitment.—A March of Dimes grant of $35,837 will assist the Committee on Careers in Nursing to continue its program of recruitment of students for nursing education. This was announced jointly by Basil O'Connor, President of the National Foundation for Infantile Paralysis, and Theresa I. Lynch, Chairman of the Committee on Careers in Nursing, National League for Nursing.

Since 1949, the National Foundation has provided financial assistance to the Committee on Careers in Nursing, which is supported by national nursing, medical and hospital organizations along with other professional and business groups, and has carried on an intensive recruitment program. For the third year the grant will underwrite the Committee's field services program to intensify the recruitment of students for both professional and practical nursing schools.

In commenting on the March of Dimes grant, Miss Lynch said, "The present inadequate supply of nurses is a crucial problem to the National Foundation for Infantile Paralysis and to every individual or agency concerned with the care of the sick. The demand for nurses continues to exceed the available supply. At present, the estimated shortage of nurses for civilian needs alone is 50,000."

Since adequate nursing is an important element in the treatment of polio patients, the National Foundation for Infantile Paralysis is actively supporting the recruitment of nurses.

* * *

Parent Institute on Nursery School for the Hard of Hearing.—The thirtieth annual parent institute on nursery school sponsored by the Michigan School for the Deaf will be held March 22 through 27, 1953, on the Campus of the Michigan School for the Deaf. Dr. Willard Olson, dean of the School of Education and director of research in child development at the University of Michigan will be the banquet speaker. He will speak on "Child Development."

The program for the parents, consisting of classes, observations, consultations, scheduled tours and lectures, has been planned to assist parents with their child during the preschool years. There is much parents can do to train their child during these early years and help him to develop habits and patterns which will be important to him throughout his life.

The program for the children is one of attendance at a nursery school to help start them on the road to new experiences in learning.

Attendance is open to any mother or father (or both)

(Continued on Page 218)



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of this State and their deaf or hard-of-hearing preschool child. Educators, rehabilitation workers, and other interested individuals are welcome to attend any or all meetings listed in the program.

There will be no charge to parents and children attending the institute.

* * *

National Health Conference in 1953.—New developments in methods for protecting and improving the health of the American worker and of insuring his safety will be reported by the nation's leading industrial doctors, dentists, nurses and hygienists at the 1953 National Industrial Health Conference to be held in Los Angeles, April 19-24.

Professional groups participating in the conference will be the American Conference of Government Industrial Hygienists, United States Navy Industrial Health Organization, American Association of Industrial Dentists, American Industrial Hygiene Association, Industrial Medical Association, and the American Association of Industrial Nurses.

This is the first time the six groups have ever scheduled their sessions together on the West Coast. Phenomenal increase in industrial activity in this area, particularly in Southern California, has finally attracted this important national conclave.

George F. Wilkins, M.D., medical director of New England Telephone and Telegraph Company, is president-elect of the Industrial Medical Association.

Michigan doctors attending the December AMA Session were: Warren W. Babcock, M.D., Detroit; Donald R. Ballard, M.D., Dearborn; R. E. L. Berry, M.D., Ann Arbor; B. B. Blum, M.D., Petoskey; Paul R. Boothby, M.D., Lawrence; William Bromme, M.D., Detroit; R. H. Denham, M.D., Grand Rapids; J. S. DeTar, M.D., Milan; L. J. Gariepy, M.D., Detroit; Harold H. Gay, M.D., Midland; J. P. Gray, M.D., Detroit; and Harry Greenbaum, M.D., Jackson.

M. R. Hannum, M.D., Milan; Wilfrid Haughey, M.D., Battle Creek; W. B. Howes, M.D., Detroit; R. J. Hubbell, M.D., Kalamazoo; Wm. A. Hudson, M.D., Detroit; W. H. Huron, M.D., Iron Mountain; W. A. Hyland, M.D., Grand Rapids; R. A. Johnson, M.D., Detroit; Jack Lapides, M.D., Ann Arbor; S. J. Nichamin, M.D., Detroit; R. L. Novy, M.D., Detroit; G. B. Ohmart, M.D., Detroit; C. I. Owen, M.D., Detroit; G. C. Penberthy, M.D., Detroit; Alfred J. Shreve, M.D., Dearborn; E. D. Spalding, M.D., Detroit; E. C. Texter, M.D., Detroit; and Lloyd A. Watts, M.D., Detroit.

* * *

Frederick F. Yonkman, M.D., formerly of Detroit and Wayne University College of Medicine, has been elected Vice Chairman in Charge of Research by the Board of Directors of Ciba Pharmaceutical Products, Inc., of Summit, New Jersey.

Dr. Yonkman was born in Holland, Michigan. He

(Continued on Page 220)

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(Continued from Page 218)

received his A.B. degree from Hope College in 1925, his Ph.D. degree from the University of Iowa in 1928, and his M.D. degree from Boston University School of Medicine in 1939. Dr. Yonkman is now on the teaching staff of the College of Physicians and Surgeons of Columbia University, and is also a director of the American Pharmaceutical Manufacturers Association.

Congratulations Vice President Yonkman!

* * *

Michigan Speakers at the AMA Clinical Session in Denver were: R. E. L. Berry, M.D., of Ann Arbor on "The Management of Acute Surgical Dehydration," and Jack Lapides, M.D., of Ann Arbor on "Fluid and Electrolyte Disturbances in Prostatism."

* * *

Frank H. Krusen, M.D., of Rochester, Minn., in an article "New Frontiers in Rehabilitation" in the December Number of "The Crippled Child" magazine, official publication of the National Society for Crippled Children and Adults, urges doctors of medicine to adopt the new concept of treating the patient as "a whole person" and to enlist aid of their communities in bringing about full recovery. He asks the physician to share responsibility for the ultimate restoration of the patient with community leaders, such as businessmen, scientists and educators. Copies of *The Crippled Child* magazine may be obtained by writing the editor, 11 S. LaSalle Street, Chicago 3, Illinois.

Two commendable innovations appear in the Bulletin of the Saginaw County Medical Society: (a) the monthly listing of the birthdays of members of Saginaw County Medical Society and (b) frequent insertions of a liner reading "Attend your medical society meeting."

* * *

The Michigan Academy of General Practice, at its meeting in East Lansing on November 17-18, elected the following officers: President: F. E. Luger, M.D., Saginaw; President-Elect: Karl L. Swift, M.D., Detroit; Secretary-Treasurer: Russell F. Fenton, M.D., Detroit. Board of Directors: Kenneth Johnson, M.D., Lansing, and John Rice, M.D., Kalamazoo (other members on the Board are: Charles G. Steinke, M.D., Iron Mountain; G. B. Saltonstall, M.D., Charlevoix; William F. Reus, M.D., Grand Rapids; W. B. Harm, M.D., Detroit.)

Delegates to the American Academy of General Practice: J. S. DeTar, M.D., Milan, and John H. Schlemer, M.D., Detroit. **Alternates:** Perry C. Gittins, M.D., Detroit, and Samuel J. Buist, M.D., Grand Rapids.

Lunette I. Powers, M.D., Muskegon, was presented with Honorary Membership in the Michigan Academy of General Practice.

The newly formed local Chapter of Ingham County was presented with its charter.

The idea of forming a House of Delegates was postponed to the 1953 Annual Meeting.

* * *

Qualifying examinations for Fellowship in the United States Chapter of the International College of Surgeons

will be held February 2-3, May 4-5, August 10-11, November 2-3, 1953. The examinations will be given at the Cook County Graduate School of Medicine, and the Cook County Hospital, Chicago. Applicants may address communications to Harry A. Oberhelman, M.D., Secretary, Qualification and Examination Council, 1516 Lake Shore Drive, Chicago 10, Illinois.



"Tuberculosis is a social disease and presents problems that transcend the conventional medical approach. . . . The impact of social and economic factors [must] be considered as much as the mechanisms by which tubercle bacilli cause damage to the human body."—From "The White Plague," a comprehensive story of tuberculosis by René and Jean Dubos. Dr. Dubos is a member of the Rockefeller Institute for Medical Research.

—Michigan Tuberculosis Association

In the 1953 Congress there isn't a Republican Senator who has served under a Republican President and only 15 House members have.—Chamber of Commerce of the United States, *Legislative Outlook,* January 5, 1953

The Cornell Medical Index Health Questionnaire was discussed in an article in the *Bulletin of the Genesee County Medical Society,* December 23, by Robert D. Scott, M.D., who reported on using the questionnaire with 140 patients in an eleven-month period.

* * *

L. J. Hirschman, M.D., Traverse City, addressed the Traverse City Rotary Club on January 20. His subject was "The Beaumont Memorial Restoration on Mackinac Island."

* * *

The American Society for the Study of Sterility announces the opening of the 1953 contest for the most outstanding contribution to the subject of infertility and sterility. For full particulars, write Herbert H. Thomas, M.D., 920 S. 19th Street, Birmingham, Ala.

* * *

Taxes: More money is paid for taxes than for food and clothing. Federal taxes cost $1,389 per family, and nearly $1,934 per family when the state and local taxes are included.

The public debt now represents $1,500 per person, and even the interest on the debt amounts to $140 per family! —George C. Smith, Manager, Government Economy Program, U. S. Chamber of Commerce, Washington, D. C.

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Laboratory Fees in Hospital	5.00	10.00	15.00	20.00
Operating Room in Hospital	10.00	20.00	30.00	40.00
Anesthetic in Hospital	10.00	20.00	30.00	40.00
X-Ray in Hospital	10.00	20.00	30.00	40.00
Medicines in Hospital	10.00	20.00	30.00	40.00
Ambulance to or from Hospital	10.00	20.00	30.00	40.00
COSTS (Quarterly)				
Adult	2.50	5.00	7.50	10.00
Child to age 19	1.50	3.00	4.50	6.00
Child over age 19	2.50	5.00	7.50	10.00

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Thomas M. Rivers, M.D., Rockefeller Hospital for Medical Research, New York, will be guest speaker at the special meeting of the Michigan Health Officers Association arranged coincident with the Michigan Clinical Institute.

Dr. Rivers will speak on "The Relation of Medical Research to Clinical Practice and Public Health" on Thursday, March 12, 1953 at 6:30 p.m. in the Pan American Room, Sheraton-Cadillac Hotel, Detroit.

The dinner meeting will be preceded by a reception honoring Dr. Rivers and the officers of the MHOA.

Medical practitioners and health officers of Michigan, Ontario, northern Ohio, northern Indiana and eastern Wisconsin, and their ladies, are cordially invited to attend this dinner meeting of Thursday, March 12, 1953, 6:30 p.m.

The lists of contributors to the Beaumont Memorial Restoration Fund appearing on pages 134-142 was incomplete at press time. To avoid delay in publication of the February issue, additional names will be listed in the March issue. If your name does not appear in the list this month, it will be listed next month.

According to a U. S. Chamber of Commerce report, every Federal Department with one exception—Justice —spent more money last July, August and September than in the same period of 1951. Total spending for the period, the first quarter of fiscal year 1952, was $17,800,000 or 19 per cent more than was spent in the same three months of last year. Spending of Federal Security Agency, including Public Health Service, was $663 million, as against $596 million, or an increase of 11 per cent. Veterans Administration was spending less. The Chamber notes that the sharpest increases were in "strictly civilian agencies." Departmental increases were: Agriculture 60 per cent, Commerce 6 per cent, Defense 26.4 per cent, Labor 60.2 per cent, Postoffice 16.7 per cent, State 53.8 per cent, and Treasury 3.4 per cent.—*Capitol Clinics,* Nov. 4, 1952.

* * *

The Ingham County Medical Society met on December 16 and elected the following officers: President, K. H. Johnson, M.D., Lansing; President-Elect, H. E. Cope, M.D., Lansing; Secretary, J. L. Isbister, M.D., Lansing.

Delegates to MSMS: F. L. Troost, M.D., Holt; J. M. Wellman, M.D., Lansing; K. H. Johnson, M.D., and O. B. McGillicuddy, M.D., Lansing.

* * *

In 1951, 432,995 patients, 84.6 per cent of all patients discharged from Veterans Administration Hospitals in 1951, were veterans who were ill from non-service-connected disabilities. In other words, they were not ill

(Continued on Page 224)



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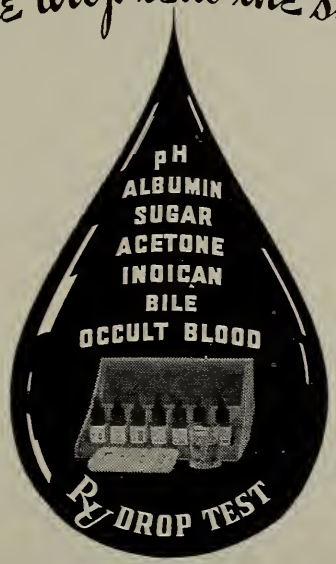
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(Continued from Page 222)

or disabled because of diseases or injuries suffered as a result of their military service but because of diseases and injuries incurred after they had returned to civilian life. The VA hospital and medical service is now costing taxpayers about $600,000,000 a year.

* * *

American football got its start in 1875 when McGill University played at Harvard. The first half was played under Rugby rules, the second under Soccer rules!

During later years the game was standardized as we know it today, with the forward pass being introduced in 1906.—*Northwestern Mutual Notes.*

* * *

Howard A. Rusk, M.D., New York (guest essayist on recent MSMS Annual Session and Michigan Clinical Institute programs), was awarded the Dr. C. C. Criss Gold Medal and $10,000 award in recognition of his work in rehabilitating the physically handicapped.

Congratulations, Dr. Rusk!

* * *

Surveys conducted in early December, 1952, by Smith, Kline & French Laboratories, Philadelphia, which cooperated with the American Medical Association in sponsoring telecasts from the AMA Interim Session in Denver, revealed overwhelming acceptance by the public of TV programs of this type.

The surveys also showed that the "March of Medicine" telecasts accomplished two objectives: (1) They informed the public of advances being made against major health problems, and (2) developed a better public understanding of the basic problems of medicine as reflected through the continuing research and postgraduate studies of doctors of medicine.

INGHAM COUNTY MEDICAL SOCIETY

Silver Anniversary—May Clinic

On Thursday, May 7, 1953, the Ingham County (Michigan) Medical Society will celebrate the Silver Anniversary of the formation of its Spring Clinic. This year's one-day meeting will be held, as in the past, at the Olds Hotel, Lansing, beginning at 2:00 p.m. The program follows:

Afternoon

Edith Potter, M.D. University of Chicago Medical School	"Obstetrics"
Walter Palmer, M.D. University of Chicago Medical School	"Gastro-intestinal Disease"
G. G. Duncan, M.D. Jefferson Medical College	"Diabetes"
Louis A. Buie, M.D. Rochester, Minn.	"Rectal Disease"

Evening

Social Hour—Dinner—Ballroom, Olds Hotel

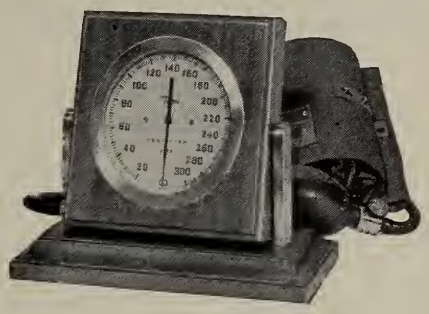
R. B. Robins, M.D., President
American Academy of General Practice
Camden, Arkansas
"Is General Practice Here to Stay?"



Eli Lilly & Company of Indianapolis was host to students of Wayne University College of Medicine, Detroit, at Indianapolis, Indiana, on December 14, 15 and 16, 1952. While guests of the company, the future doctors inspected the research laboratories and toured pharmaceutical, biological and antibiotic production facilities of the Lilly establishment.

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The Association of American Physicians and Surgeons announces the seventh Annual National Essay Contest for High School Students, to include the tenth through twelfth grades, public and parochial schools; the seventh to ninth grades are optional. This contest is sponsored with the co-operation of the State and County Medical Societies. The subject: "Why the Private Practice of Medicine Furnishes this Country with the Finest Medical Care."

Six prizes include: the first, $1,000; the second, $500; the third, $100, and three prizes of $25 each. Surveys in 1944 showed that young students were 80 per cent in favor of a Federal system for providing medical services for all. In 1950 the same type survey, conducted by the same group, the percentage had fallen to 55 per cent. These young people are the voters of the future, and it is important that their sociological attitude is factual. This essay contest is primarily for that purpose.

The Michigan member of the Contest Committee for 1953 is Lynn A. Ferguson, M.D., Grand Rapids, Michigan. For further information, write the Association of American Physicians and Surgeons, Inc., 360 North Michigan Ave., Chicago 1, Illinois.

* * *

The Northern Tri State Postgraduate Medical Association will hold its annual meeting at Ann Arbor, Michigan, April 2, 1953. The program has not yet been announced but will extend throughout the day.

For further information, write William Henry Gordon, M.D., 1102 David Whitney Bldg., Detroit 26, Michigan.

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GENESEE COUNTY MEDICAL SOCIETY

The Eighth Annual Cancer Day Program

Flint, Michigan

Merliss Brown Auditorium — Hurley Hospital

Wednesday, April 8, 1953

Morning Session—9:30 A.M.

Presiding—L. W. Hull, M.D., Detroit, President-Elect, Michigan State Medical Society

Address of Welcome—A. C. Pfeifer, M.D., Mt. Morris, Mich., President, Genesee County Medical Society

"Cancer of the Pancreas and Biliary Tract"
Richard B. Cattell, M.D., Attending Surgeon, Lahey Clinic, New England Deaconess and New England Baptist Hospitals, Boston, Mass.

"Differential Diagnosis and Treatment of Cancer of the Ovary"
Emil Novak, M.D., Assistant Professor of Gynecology, Johns Hopkins University; Gynecologist-in-Chief, St. Agnes and Bon Secours Hospitals, Baltimore, Md.

"Leukemia, Hodgkin's Disease and Allied Disorders"
Cyrus C. Sturgis, M.D., Professor and Director of Internal Medicine, University of Michigan Medical School and Hospital; Director of The Thomas Henry Simpson Memorial Institute of Medical Research, Ann Arbor, Mich.

Mid-day Recess—12:30 P.M.

Luncheon, Compliments of Hurley Hospital, Flint

Afternoon Session—2:00 P.M.

Presiding—Clifford H. Keene, M.D., Ann Arbor, Co-Chairman, Cancer Control Committee, Michigan State Medical Society

"The Management of Pain Problems Related to Cancer"
Frank H. Mayfield, M.D., Assistant Professor of Surgery, University of Cincinnati; Neuro-Surgeon, Cincinnati General Hospital, Cincinnati, O.

"The Use of Radioactive Isotopes in the Clinical Aspects of Cancer"
Richard H. Chamberlain, M.D., Associate Professor of Radiology in charge of Radiotherapy, University of Pennsylvania; Director of Radio-Therapeutics, Atomic Energy Commission, Philadelphia, Pa.

Panel Discussion—"Palliation and Terminal Care of Cancer Patients"

Moderator—Charles S. Kennedy, M.D., Emeritus Professor of Surgery, Wayne University Medical School; Emeritus Chief of Staff and Chief of Surgery, Consulting Surgeon, Grace Hospital, Detroit, Mich.

Panel Members: Drs. Cattell, Novak, Sturgis, Mayfield and Chamberlain.

Evening Activities—6:00 P.M.

Social Hour, 6:00 P.M.—Subscription Dinner, 7:00 P.M.
Elks Club

THE DOCTOR'S LIBRARY

Acknowledgment of all books received will be made in this column, and this will be deemed by us as full compensation to those sending them. A selection will be made for review, as expedient.

OPHTHALMIC PATHOLOGY. An Atlas and Textbook. By Jonas S. Friedenwald; Helenor Campbell Wilder; A. Edward Maumenee; T. E. Sanders; John E. L. Keyes; Michael J. Hogan; W. C. and Ella U. Owens. With the editorial assistance of Helen Knight Steward. Published under the joint sponsorship of the American Academy of Ophthalmology and Otolaryngology and the Armed Forces Institute of Pathology. Philadelphia: W. B. Saunders Co., 1952. Price $18.00.

The editors and authors of this volume have produced a most elaborate and satisfactory volume, giving the clinical and pathological descriptions of most of the ophthalmic conditions encountered in a busy practice, not forgetting many of the rarer conditions. The book is divided into eighteen chapters, or sections. The book is large, about nine by twelve, so as to allow space for illustrations. Each chapter consists of text, two columns on a page, followed by numerous plates. Every condition described in the text is well illustrated by slides and sections. There are no pictures of gross specimens. The text is well written, describing the condition, with references to the author who first described it, and continuing the history to the present understanding. In the section on glaucoma is the statement that glaucoma is not a single disease, but a group with a common condition of elevated intraocular tension. The pathological description occupies six pages. Under diabetes the very latest concept of microaneurisms is discussed, with complete elaboration of the condition and pictures of the pathology. The book is much worth while to any ophthalmologist who wishes to understand the conditions he is treatiig.

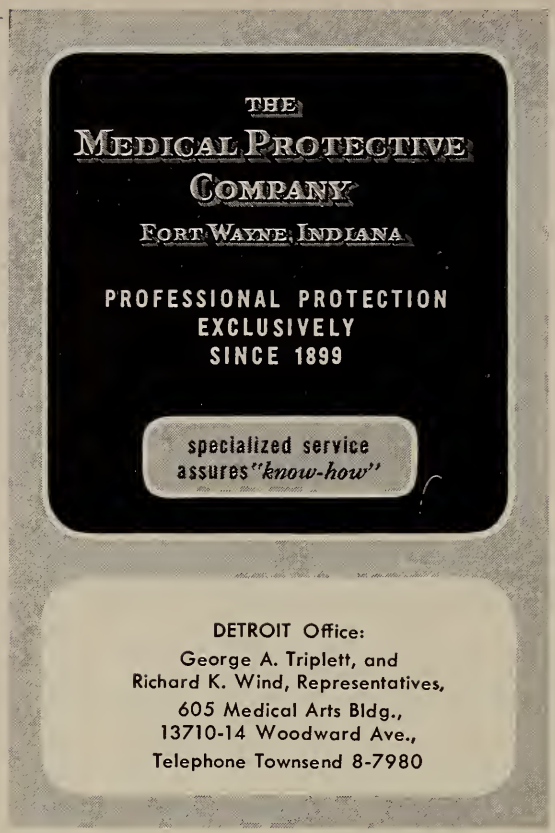
W.H.

CORRELATIVE NEUROANATOMY AND FUNCTIONAL NEUROLOGY. By Joseph J. McConald, M.S., M.Sc.D., M.D. Professor of Surgery, Columbia University; Attending Surgeon, Presbyterian Hospital; New York Director of the Surgical Service, Francis Delafield Hospital, New York, and Joseph G. Chusid, A.B., M.D. Attending Neurologist, St. Vincent's Hospital, New York. Sixth Edition. Los Altos, California: Lange Medical Publications, University Medical Publishers, 1952. Price $4.00.

This manual has grown from a correlative neuroanatomy to that of a neuro-anatomy combined with a functional neurology. It is a bound notebook type of publication now in its sixth edition which speaks for itself in its usefulness and interest. It was originally intended as a help for the student. It has remained as such, but now it has also become a handy reference for those who feel the need, and who does not, of refreshing one's mind. The fundamental facts of the central and peripheral nervous system are presented. The anatomical illustrations are copious and excellent. This book should have a special appeal to the student or physician preparing for the board examinations.

G.K.S.





Cook County Graduate School of Medicine

POSTGRADUATE COURSES—1953

SURGERY—Intensive Course in Surgical Technic, two weeks, starting February 2, February 16, March 2
Surgical Technic, Surgical Anatomy and Clinical Surgery, four weeks, starting March 2
Surgical Anatomy and Clinical Surgery, two weeks, starting March 16
Basic Principles in General Surgery, two weeks, starting March 30
Gallbladder Surgery, ten hours, starting April 20
Surgery of Colon and Rectum, one week, starting March 2
General Surgery, one week, starting February 9
General Surgery, two weeks, starting April 20
Fractures and Traumatic Surgery, two weeks, starting March 2
GYNECOLOGY—Intensive Course, two weeks, starting February 16
Vaginal Approach to Pelvic Surgery, one week, starting March 2
OBSTETRICS—Intensive Course, two weeks, starting March 2
PEDIATRICS—Intensive Course, two weeks, starting April 6
Congenital Heart Disease, two weeks, starting May 18
MEDICINE—Intensive General Course, two weeks, starting May 4
Electrocardiography and Heart Disease, two weeks, starting March 16
Allergy, one month and six months, by appointment
UROLOGY—Intensive Course, two weeks, starting April 13
Ten-Day Practical Course in Cystoscopy starting every two weeks
DERMATOLOGY—Intensive Course, two weeks, starting May 11

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PRACTICAL DERMATOLOGY For Medical Students and General Practitioners. By George M. Lewis, M.D., F.A.C.P., Professor of Clinical Medicine (Dermatology), Cornell University Medical College; Attending Dermatologist, The New York Hospital; Secretary, the American Board of Dermatology and Syphilology. Philadelphia: W. B. Saunders Co., 1952.

This is an excellent new book for the medical student or non-dermatologist. It stresses clinical features, means of diagnosis and treatment. Each paragraph throughout the book has a heading indicating the contents of the paragraph, which makes for easy reference. The number and quality of the illustrations in this book are hardly surpassed anywhere. Basic fields of histology, mycology, bacteriology, et cetera are omitted, but these are usually of no interest to the readers for whom the book is intended. The book is well-printed and well-bound. This should be a valuable book to the student and general practitioner.

H.E.A.

STANDARD VALUES IN BLOOD. Being the first fascicle of a Handbook of Biological Data. Edited by Errett C. Albritton, A.B., M.D. Fry Professor of Physiology, The George Washington University. Prepared under the Direction of the Committee on the Handbook of Biological Data, American Institute of Biological Sciences the National Research Council. Philadelphia: W. B. Saunders Co., 1952.

This book is exactly what the title implies, and the reliability of the mass of useful data presented is vouchsafed by the fact that it has been collected and sifted by over 600 competent investigators.

The tables deal with various animals, as well as man, and run the gamut from plasma viscosities to the erythrocytic oxygen consumption values of the alligator. The recently discovered rare blood groups are tabulated by frequencies and genetic traits. The material devoted to the bone marow is extensive and excellent, and the effects of radiation on hematopoietic tissues are thoroughly covered in tabular form.

The last forty-five pages are devoted to a well-arranged bibliography. The binding is poor but, since it is to be followed by two other somewhat similar fascicles, it is to be assumed that the purchaser will eventually have all three bound together.

This book is invaluable as an aid in research.

A.A.H.

PARDON MY SNEEZE. By Milton Millman, M.D., Fellow, American College of Allergists, Member, American Academy of Allergy. New York: Doubleday & Company, 1952.

The title of this book tells the subject—allergy. It is a card paper-covered volume of twenty-seven chapters, 217 pages, printed in large, easily read type, with nine illustrations other than the designs for the front and back covers. The whole field of allergy is covered from a definition to diagnosis, tests, food allergies, hay fever, the allergic nose, bronchial asthma, eczema, house dust, and the consideration of treatment, including diets. The style is free and somewhat humorous, which makes for

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interesting reading. At the end of the chapter on testing he says: "Can you now see that the best allergist is not necessarily the one with the most needles? The most co-operative patient makes for the best results." The chapter on house dust is worth many times the cost of the book because sufferers from house dust are many, and need very careful handling. This book is thorough, but brief. We believe it would be a most valuable adjunct to any allergist treating patients who are somewhat of a problem because of unusual or baffling conditions.

RYPINS' MEDICAL LICENSURE EXAMINATIONS. Topical Summaries and Questions. By Walter L. Bierring, M.D., F.A.C.P., M.R.C.P., Edinburgh (Hon.); Former Member, National Board of Medical Examiners, American Board of Internal Medicine, Iowa State Board of Medical Examiners; Professor Emeritus, Theory and Practice of Medicine, College of Medicine, State University of Iowa; Secretary, Federation of State Medical Boards of the United States; Chairman, American Board of Preventive Medicine and Public Health; Iowa State Commissioner of Health. With the collaboration of a Review Panel. Seventh Edition. Philadelphia: J. B. Lippincott Co., 1952. Price $8.00.

Dr. Rypins who was secretary of the New York State Board of Medical Examiners for fifteen years first published a volume on "Medical State Board Examinations," in 1933. He published four editions. This is the seventh of the series, the third by Dr. Bierring. Literally thousands of questions asked on various State Board examinations throughout the country were collected, and a book written covering a review of ten major branches of the medical field, explaining and answering all the questions. This is written in the form of text. At the end of each chapter are several pages of typical answers, so the student preparing for examinations might get an idea of what to expect in questions, and an inkling of satisfactory answers. Ten outstanding teachers have been selected to present the ten branches. This new edition rearranges the fields to fit modern ideas of practice and teaching methods. The book is a very complete review, and quite worth while.

BIOCHEMISTRY FOR MEDICAL STUDENTS. By William Veale Thorpe, M.A. (Cantab.), Ph.D. (Lond.) Reader in Chemical Physiology, University of Birmingham, England. Fifth Edition with 41 illustrations. Philadelphia: J. B. Lippincott Co., 1952. Price $6.00.

This volume is well written and clear. It probably has achieved this perfection by virtue of the revision attendant with five editions. The amount of material covered is amazing, although much of it mentions only the highlights of the particular topic. The chapter on vitamins is very good and also that part of the work dealing with chemistry of nutrition. It is recommended not only for medical students, but also for the average physician as an up-to-date reference book.

A.A.H.

Classified Advertising

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MIDLAND, MICHIGAN—Professional office space available. New fireproof building. Ready June 1953. Now in blue prints. Contact Mrs. H. V. Sheldon, 3210 Midland Road, Bay City, Michigan.

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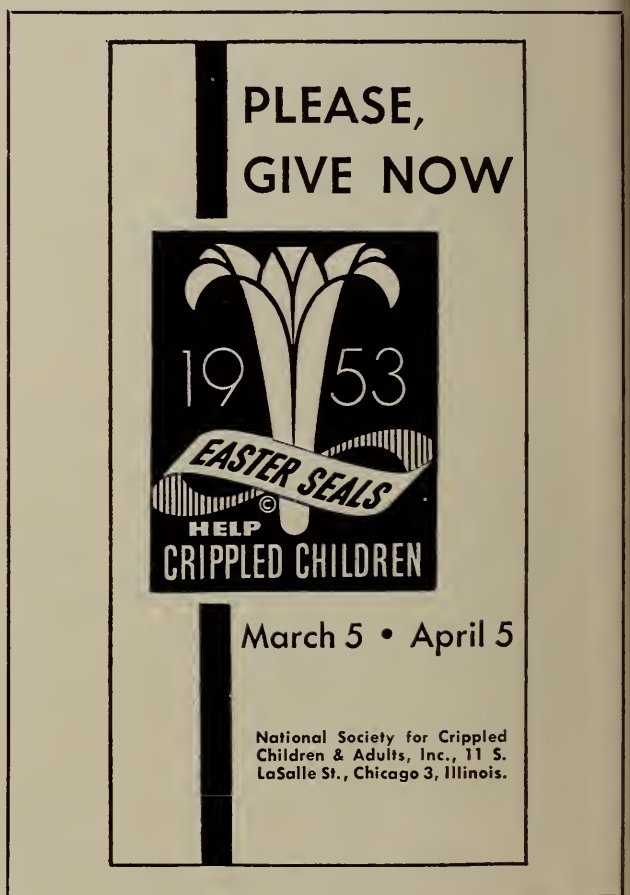
THE WELFARE STATE

It is customary to point a finger overseas when we talk about the disadvantages of the Welfare State. But right here at home we also have a striking example of what a Welfare State does for its people. Let's take a look at what the Federal government has done for the American Indian.

Here are some important truths about the Indians whose kindly government proposed, 125 years ago, to help them along briefly and then make them free:

Today a restricted Indian cannot buy, sell, or lease property except with Indian Bureau consent; he cannot have access to his money deposited for him in the Federal Treasury except by act of Congress; he cannot engage in free and unrestricted business enterprise on the reservation because the Indian Bureau has its own specially sponsored corporations to handle business matters for the Indians. He is totally dependent upon the Indian Bureau when he is out of a job, sick, or when incapacitated by old age; he cannot buy, sell, or consume alcoholic beverages either on or off the reservation; if he should happen to be a war veteran he cannot, as a rule, obtain a loan under the GI bill of rights because his property is tied up in Indian Bureau trusteeship. For each individual Indian it takes in most cases a special act of Congress to be freed from the restrictions imposed by the Indian Bureau.

Although the demand to abolish the Indian Bureau has been made in Congress year after year and has failed because so few people are acquainted with or care about the Indian's plight, it is being voiced again this year. Senator George Malone is trying to arouse the public to the danger of any form of government paternalism. "The most difficult thing in the world," he emphasizes, "is to remove a system of any kind which is organized to supervise somebody and handle his money and property, so long as the money and property hold out." —Dr. George S. Benson, President, Harding College, Searcy, Arkansas, in *GM Folks*, September, 1952.



THE JOURNAL
of the Michigan State Medical Society

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Contributors to This Issue



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R. J. Hubbell, M.D.



R. C. Moehlig, M.D.

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W. D. BARRETT, M.D.	16th	Detroit	1955
W. B. HARM, M.D.	17th	Detroit	1953
WILLIAM BROMME, M.D.	18th	Detroit	1954

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J. S. DeTar, M.D., Milan.....1953
W. D. Barrett, M.D., Detroit.....1954
W. H. Huron, M.D., Iron Mountain 1954
R. L. Novy, M.D., Detroit.....1954

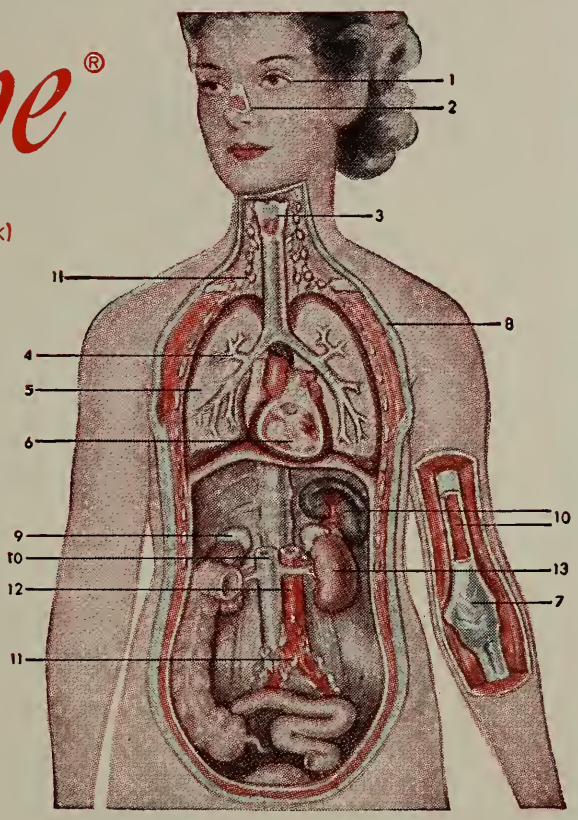
Section Delegate
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Alternates
E. F. Sladek, M.D., Traverse City....1953
W. W. Babcock, M.D., Detroit.....1953
E. C. Texter, M.D., Detroit.....1953
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†Transient beneficial effects.

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You and Your Business

THE SHOE DOESN'T FIT

The Executive Committee of The Council, Michigan State Medical Society, authorized the following statement in a news release on February 18, 1953:

Doctor Hawley is wrong about Michigan's Doctors of Medicine!

We believe that many of the charges made by Doctor Hawley, as reported in the national press, have little basis in fact so far as the practice of medicine in Michigan is concerned.

It has been the long-time policy of the Michigan State Medical Society, in co-operation with members of the Michigan Hospital Association, to examine continuously and to investigate all matters relating to the care of patients:

(1) All recognized hospitals examine tissue removed at operation with a view of checking against the stated reason for operation;

(2) A growing number of hospitals is utilizing a continuing medical audit of their medical staffs;

(3) All county medical societies in Michigan have long since set up Grievance Committees to investigate complaints and take necessary action. These committees are equipped to handle complaints the type of which Doctor Hawley mentioned.

(4) The Michigan State Medical Society By-Laws adequately cover discipline of members. They have teeth!

(5) Most discipline is meted out at the County Medical Society or hospital staff level. In our effort to protect the people of Michigan, these safeguards—in operation in Michigan for years—go far beyond the recommendations of Doctor Hawley.

In view of the recent publicity, the Michigan State Medical Society and its fifty-five component County Societies will redouble their efforts to protect the public against unethical practices.

Unfortunately, not *all* surgery is done by Doctors of Medicine or in hospitals belonging to the Michigan Hospital Association.

SENATOR CHARLES S. BLONDY (D, DETROIT) OFFERS RESOLUTION TO MICHIGAN LEGISLATURE TO PROBE DOCTORS

Senate Resolution No. 19, offered February 18, 1953.

A resolution creating a special committee of the Senate to investigate the charges and public accusations made by and against the members of the medical profession.

WHEREAS, Public accusations have been made by and against the medical profession in the public press of fee splitting, exorbitant rates and ghost surgery; and

WHEREAS, The health and welfare of the people of the state of Michigan should at all times be protected; now therefore be it

RESOLVED by the Senate, That there is hereby created a special committee of the Senate to function during the 1953 regular session of the Legislature, to consist of three members of the Senate, to investigate the charges and public accusations made by and against the members of the medical profession and to report its findings to the Senate at the earliest possible moment; and be it further

RESOLVED, That such committee is authorized to administer oaths, subpoena witnesses and/or to examine books and records of any persons, partnerships or corporations involved in a matter properly before such committee; and be it further

RESOLVED, That the members of the committee shall serve without compensation but shall be entitled to actual and necessary traveling and other expenses incurred in the performance of official duties, to be paid from the appropriation to the Senate."

Pursuant to rule 59, the resolution was referred to the Committee on Senate Business.

WORKMEN GET FRINGE PAY

Workmen in a cross-section of 109 American companies draw an average $653 a year in "fringe benefits" which don't show up in pay envelopes—pensions, sick benefits and the like. This "hidden wage" of $12.50 a week was found by the United States Chamber of Commerce in a three-year survey of "fringe benefits."

The Government's Bureau of Labor Statistics (BLS) says the C. of C. survey is "the most complete study that has been done in this country."

In 1949 C. of C. researchers found that the average workman enjoyed welfare benefits that cost an average 23.7 cents an hour, $477 a year.

In 1951 they found that fringe benefits had increased to 16.2 per cent, the cost per hour to 31.1 cents per worker and the cost per year to $653.

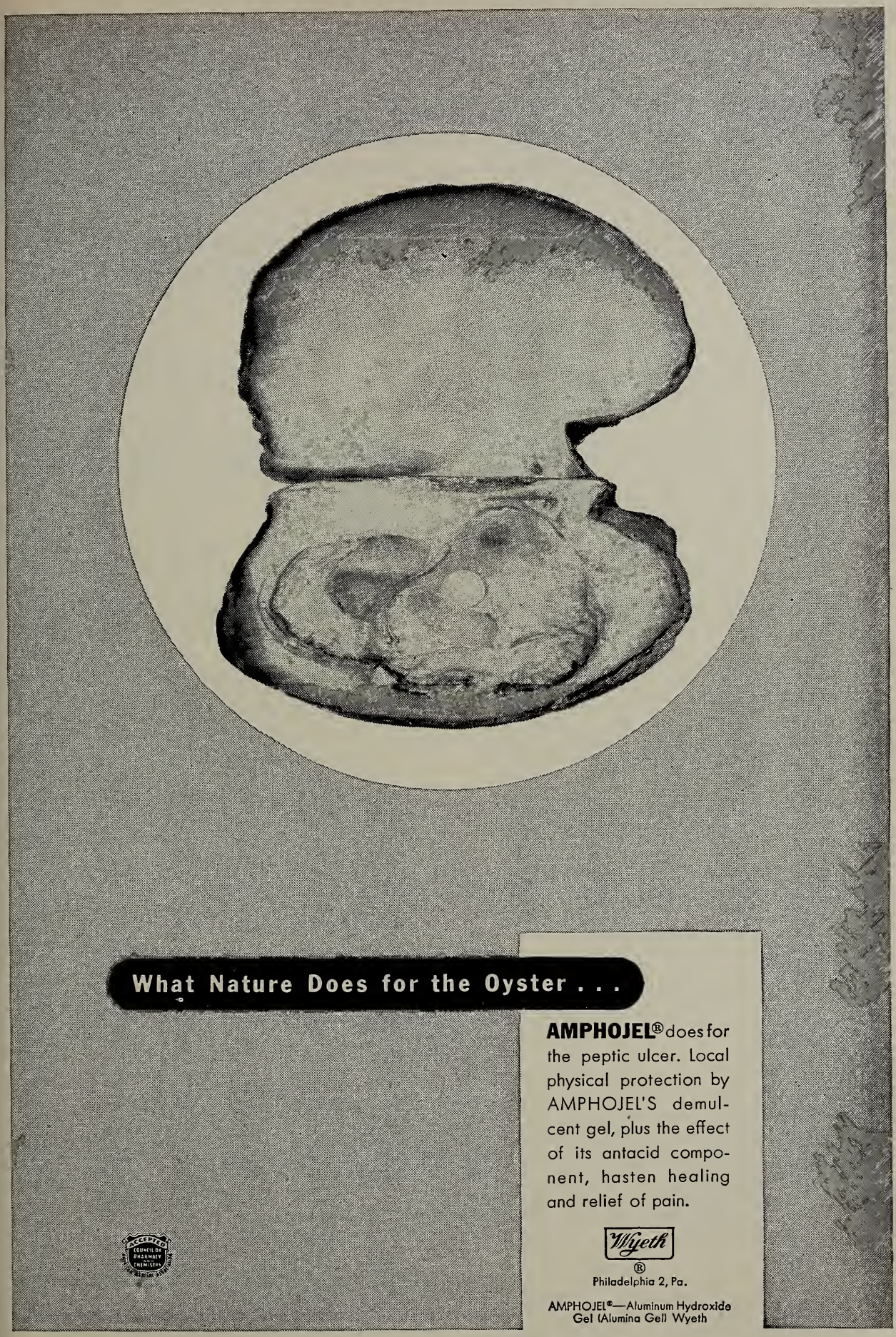
Here are types of fringe benefits which the C. of C. lists:

1. Legally required payments for unemployment and workmen's compensation, old age insurance and off-the-job sickness insurance (now in four states and for all railroads).

2. Private pensions, life insurance, sickness benefits, hospital and medical programs, separation pay, discounts on employe purchases, free or below-cost meals.

3. Paid vacations, rest periods, lunch hours and holidays and payments during jury and national guard duty.

4. Profit-sharing Christmas bonuses, suggestion and service awards.


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Heart Beats

THE PROTECTION OF RHEUMATIC FEVER PATIENTS CARED FOR IN THE WARDS OF GENERAL AND CHILDREN'S HOSPITALS*

Because questions frequently arise in connection with the protection of rheumatic fever patients in general and children's hospitals, the following statements intended to guide such hospitals are issued by the Council on Rheumatic Fever and Congenital Heart Disease of the American Heart Association. They should be regarded as embodying certain principles which an individual hospital may apply in its effort to achieve protective measures.

1. Attacks of rheumatic fever frequently follow group A streptococcal infections—usually of the upper respiratory tract.

2. Persons who have recovered from an attack of rheumatic fever or who have rheumatic heart disease, even though the rheumatic fever may be quiescent, are especially liable to develop a recurrence of the disease if they contract a Group A streptococcal infection. Moreover, a new rheumatic attack may be induced in a patient in the subacute active stage if he contracts a new infection with Group A hemolytic streptococci of a serological type, or types, different from that which previously infected him.

3. The introduction of rheumatic fever patients into hospital wards or other environments, such as Out-Patient Departments, where Group A streptococcal carriers may be encountered, exposes them to hazards which should be avoided. To the extent that is reasonably possible in the individual institution, protection of such patients from contact with other patients, visitors or employes suffering from such hazardous infections should be practiced.

Patients suffering from scarlet fever, erysipelas, or acute glomerular nephritis may be considered specially dangerous even without further laboratory confirmation of type of organism involved. Sore throat or acute tonsillitis, especially when associated with exudates, distinct fever, and leukocytoses, may ordinarily be considered almost as dangerous. Milder upper respiratory infections are also dangerous. Dust and lint from bedding, handkerchiefs, and clothing in the immediate environment of a person who is expelling streptococci from his mouth or nose are potent sources of infection, as are also dishes and other utensils he uses.

4. Susceptible rheumatic fever patients while in dangerous environments such as open wards should receive treatment (chemotherapeutic or antibiotic drugs) that will markedly decrease their liability to contract such streptococcal infections. Furthermore, it is possible by suitable protective measures to render their environments comparatively free from danger of re-infecting them with Group A hemolytic streptococci. For suggested appropriate individual treatment see section below.

5. To the fullest extent possible within the laboratory facilities of the hospital, or those available to the hospital, all reasonable efforts should be made to determine the presence of Group A streptococci among patients or personnel of the ward and to deal appropriately with such cases when the organism is identified.

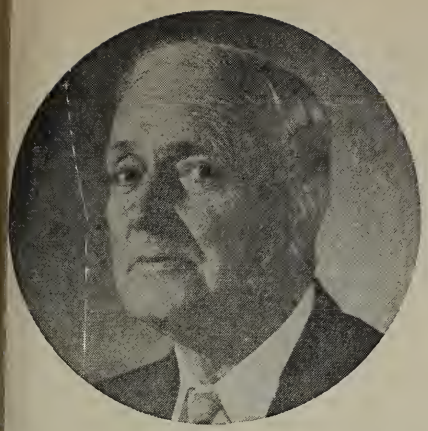
6. Mindful of the above facts and recognizing that in the average general hospital environment complete communicable disease ward precautions and techniques for the protection of the rheumatic fever patient are neither possible nor psychologically desirable, the hospital caring for such patients should nevertheless institute procedures and measures which will protect such patients. Detailed protective procedures should be developed by the individual institution through the collaboration of the appropriate responsible members of the medical, pediatric and laboratory staffs, Nursing Department and Administration.

In developing protective measures which will in effect better protect the rheumatic fever patient from his environment and not others from him, strong emphasis should be placed on appropriate education of the patient, the family and hospital workers who are in regular or casual contact with rheumatic fever patients.

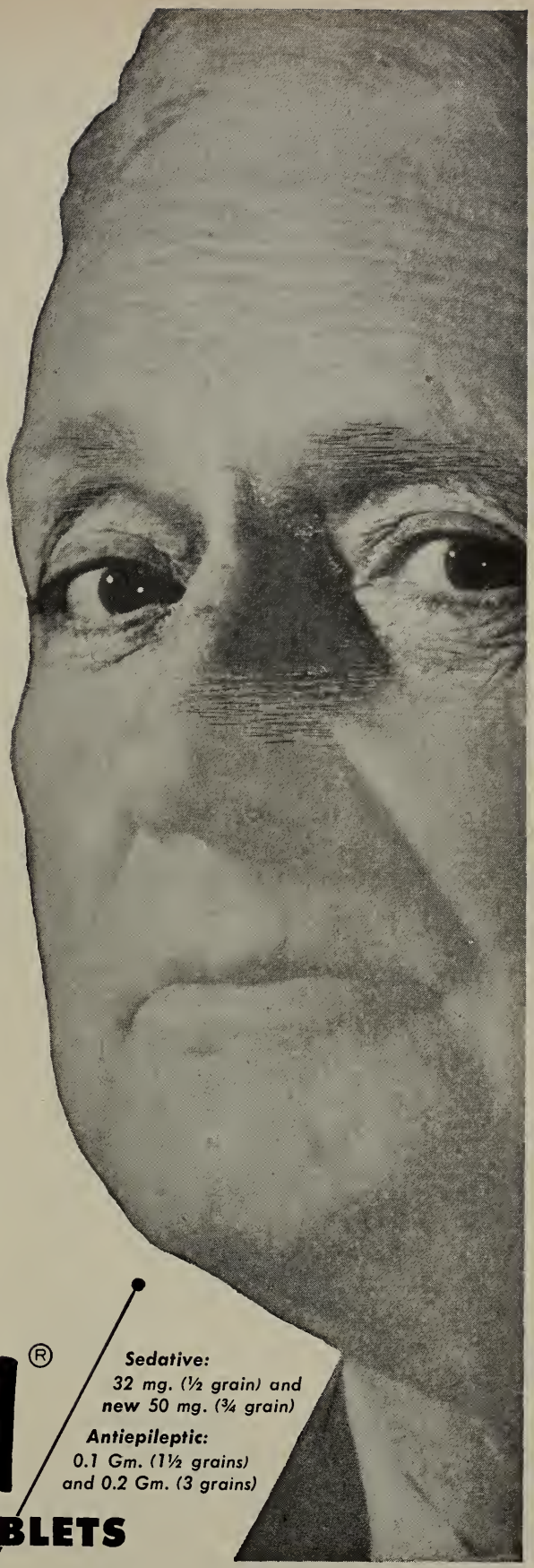
*The term "Rheumatic Fever" is considered to include rheumatic fever and rheumatic heart disease, for the purpose of this statement.

OLD GLORY—LONG MAY IT WAVE!

The Stars and Stripes—our national flag—is the third oldest national standard in the world . . . It is older than the Union Jack of Great Britain or the Tri-color of France . . . It was first authorized by Congress on June 14, 1777, and was first flown from Fort Stanwix (now Rome, New York), August 3, 1777 . . . First carried into battle at Brandywine, September 11, 1777, and was first flown over foreign territory at Nassau, Bahama Island, on January 28, 1778 . . . The Stars and Stripes received its first foreign salute on February 13, 1778, from the French Admiral LaMott Piquet.—*American Legion Magazine,* February, 1953.



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Cancer Comment

TUMORS OF THE BLADDER
The H-C Interval

The term in the title is intended to express the time elapsing between the appearance of hematuria and the date of the first cystoscopy. It is all too often a tragically long period.

The usual clear-cut and emphatic way in which a tumor of the bladder makes its presence known by a gross hematuria and the simplicity and certainty of making a diagnosis by cystoscopy leave no valid excuse for the too frequent postponement of care of this neoplasm often so amenable to treatment when attacked early.

Hematuria is an alarming symptom, especially to the patient. Unfortunately the reassurance by its cessation seems to be enough too often for both doctor and patient. The red light flashed but then it went out and all is well. Each time this happens it becomes more evident that the bleeding is only a transient thing and a little methylene blue, urotropine or good old tincture of time will take care of it. Then one day the hemorrhage becomes massive, clots and perhaps pieces of necrotic tissue pass, the bladder becomes extremely irritable and perhaps obstructed; examination then often shows that the growth has gone too far for any hope of control. The tumor of the mucosa about one centimeter in diameter waiting to be found a year or two ago has now gone through the muscle and involves a third of the bladder.

Consider the following cases in point, presented as thumbnail sketches.

Case 1. D. K., a sixty-year-old woman, had painless hematuria for two years. She was "treated" during that time by a chiropractor. On seeking medical care, she was found to have a red blood cell count of 2,050,000; Hgl. 42 per cent. Cystoscopy showed large infiltrating carcinoma on the right posterior wall of the bladder.

Case 2. R. S., a fifty-seven-year-old man, had painless hematuria "on and off" for two years before seeking medical advice. Cystoscopy showed beginning invasion of muscle layer by vesical papilloma with moderate growth capacity. The papilloma was excised, fulgurated, and radon seeds were implanted. There was a fair prognosis, but the patient's suicide prevented a follow-up.

Case 3. R. W., an eighty-two-year-old man, was treated with medicines for two and one-half years by a semi-retired physician for hematuria of increasing severity. On cystoscopy, the bladder was found filled with papillomata.

Case 4. V. F., a fifty-three-year-old woman, had "bloody urine" which began five years before she was seen by a doctor. This recurred after any long automobile trip. Urgency and interruption of urinary stream, then profuse hematuria developed. A large papilloma to the left of the trigone was found on cystoscopy.

Case 5. J. F., a fifty-nine-year-old man, had hematuria seven years ago. He was seen by an urologist, cystoscopy was performed and an operation was advised but postponed by the patient. On the second cystoscopy a large papilloma was found to be involving the right ureteral orifice.

Case 6. B. C., a twenty-one-year-old woman, had hematuria in a four-months pregnancy. She had "bleeding" during a pregnancy two years before and was told to control it by bed rest. The obstetrician for the second pregnancy advised cystoscopy, and a papilloma was then found to be the cause of bleeding.

In this sample series of cases, the astonishing evidence is that the elapsed time between the known onset of hematuria and the cystoscopy, the H-C interval, averages well over two years even with the exclusion of Case 5 where the patient delayed even after cystoscopic proof of the presence of a tumor.

The list could be extended indefinitely, but fortunately is not as long as the list of patients who have heeded their physicians' warning and presented themselves for cystoscopy at the onset of the hematuria. Sometimes some simple explanation for the bleeding is found. It may be mild trigonitis or a varix in the vesical mucosa, but who can say without looking?

And who could dare to support and feed the timid patient's dread of the cystoscope and expose him to the invasion of a cancer! The inspection of the bladder need not induce any more pain than the passage of any urethral instrument and that includes a catheter which in sizes closely approximating the calibre of a cystoscope is surely freely exercised. Topical anesthetics with sedation are usually quite sufficient for gentle instrumentation. When these do not suffice surely the use of low spinal, sodium pentothal or trichlorethylene inhalation provides complete relief from all suffering except that caused by the patient's fear of knowing the truth.

Meticulous care of terminal cancer patients will allow them to live comfortably for a relatively long period of time, but indifference will result in a premature, often painful, and distressing exodus.

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PR REPORT

Current Public Relations Activities of MSMS

MSMS Conference Attracts PR Leaders

Practical ideas on practical public relations were carried back to Michigan's component county medical societies by the 111 MSMS and Woman's Auxiliary members who attended the State Society's Public Relations Conference in Detroit, February 1.

The morning session, presided over by Ralph A. Johnson, M.D., Detroit, PR Committee Vice Chairman, covered Procedures and Techniques of Public Relations. George B. Finch, Detroit, Vice President in Charge of Sales of The Jam Handy Organization, Inc., presented a discussion on audio-visual equipment called "Stick It in Their Eye." Dr. Howard Y. McCluskey, University of Michigan Professor of Educational Psychology, spoke on the topic of "Audiences are Participants in Successful Meetings," and Eugene H. Wiard, Michigan Health Council Executive Secretary, explained techniques of "Getting Out a Crowd."

In the second section of the morning session, the general topic of "How to Reach 'The People' " was discussed in relation to the media of radio-TV, films and newspapers by Charles Penman, WWJ Program Director, Detroit; Don Doane, of Doane Productions, East Lansing; and Ernest T. Guy, Michigan Heart Association Executive Secretary, respectively.

The film, "Without Fear," was screened during the luncheon period.

The afternoon program, under the chairmanship of R. Wallace Teed, M.D., Ann Arbor, PR Committee Vice Chairman, consisted of informative talks including "The Bay City Story," by Orlen J. Johnson, M.D., Bay City; "Legislative Prophecies," L. A. Drolett, M.D., Lansing, Chairman, MSMS Legislative Committee; "Let's Get Together," Warren B. Cooksey, M.D., Detroit, President, United Health and Welfare Committee; and "Little Troubles Become Big Issues," C. Allen Payne, M.D., Grand Rapids, Chairman, MSMS Public Relations Committee. Dr. Payne also served as General Chairman of the Conference.

PR Committee Actions

Many important projects were considered and approved by the MSMS Public Relations Committee at its meeting in Detroit, January 31, 1953.

The Committee recommended production of two films: The first, on the subject of Personal Health Appraisal, is to be attempted with the cost defrayed by a pharmaceutical firm. The second, a less ambitious project, is to be a short picture on medical associates to assist in stimulating recruitment of these valuable aides, and will be made from MSMS Public Relations funds.

The other projects, which should greatly assist County Medical Societies and individual M.D.s, were also set into motion.

An old problem—referral of patients—was given re-emphasis and possible solution. Henceforth county medical societies are asked to be responsible for developing with their members a knowledge of what to do with and ideas on how to handle a patient whom an individual doctor of medicine cannot personally serve with proper medical care. These include patients requiring the assistance of specialized medical attention; indigent patients requiring the assistance of a welfare agency; and patients who ask for the attention of their personal doctors but cannot receive his services because the doctor is incapacitated in some manner or unavailable. County medical societies are being requested to review the local and state agencies available for indigent and semi-indigent patients so that their members are informed on what facilities are available and how they can be used.

An adult education program for the office assistants of the M.D. was enthusiastically approved. Subjects taught would include office management, telephone techniques, insurance forms, and an understanding of the doctor of medicine, i.e., the educational requirements of M.D.s plus the difference between an M.D. and other healers. This adult education course should be worked out in co-operation with local organizations of the Michigan State Medical Assistants Society.

"Medical Mailbox"

MSMS Television Program

WXYZ-TV (Channel 7), Detroit **Friday, 12:30 P.M.**

Participant	*Topic*	*Date*
E. S. Gurdjian, M.D., Detroit	Ruptured Discs and Their Surgical Care	March 13
Joseph G. Molner, M.D., Detroit	Spring and Contagious Diseases	March 20
L. A. Drolett, M.D., Lansing Rep. Howard Estes	Enrichment of Flour	March 27
James E. Croushore, M.D., Detroit	Watch Your Throat	April 3
H. C. Walser, M.D., Detroit	Blue Babies	April 10

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Michigan Hospital Service

BLUE CROSS RATE INCREASE

Rising hospital costs and increased utilization by members have combined to force an upward adjustment in Blue Cross rates, effective April 1.

For those covered by the comprehensive group contract the increases will be 20 cents per month for single subscribers and 80 cents per month for two-person and full family coverage.

The increases were authorized by the board of trustees of Michigan Hospital Service and approved by the state insurance commissioner.

There is no change in rates for companion Blue Shield surgical and medical-surgical coverage carried by over 94 per cent of the Blue Cross members.

Thus the new Blue Cross rates will constitute an average increase of about 10 per cent in the overall cost of protection for the overwhelming majority who have this combined coverage.

For example, the standard monthly rates after April 1 for combined Blue Cross-Blue Shield hospital-surgical group coverage will be:

Single subscriber, Ward Contract, $3.00 instead of $2.80; Semi-private Contract, $3.30 instead of $3.10.

Two-person, Ward Contract, $7.65 instead of $6.85; Semi-private Contract, $8.15 instead of $7.35.

Full family, Ward Contract, $8.45 instead of $7.65; Semi-private Contract, $8.95 instead of $8.15.

The following developments in the last eighteen months made the Blue Cross rate adjustment necessary:

1. A steady rise in the cost of hospital care. Average charge per Blue Cross case increased 12 per cent. The average charge per case is now $150 as against $134 in June, 1951.

2. There has been a significant increase in the percentage of Blue Cross members who are being hospitalized. Today, for every 1,000 members, an average of 140 per year are being admitted for hospital care as against an average of 128 per thousand in 1951. That's an increase in utilization of about 10 per cent.

Adding it up, Blue Cross is paying for twelve more hospital admissions per 1,000 members per year than it did 18 months ago and the average cost of every admission has increased $16.

General inflation naturally has contributed to the increased cost of hospital care, but it is not the only factor.

Medical progress is constantly introducing into our hospitals new methods and new services which all add up to better care. However, they necessarily add to the cost.

They cost the hospital more in terms of new equipment and salaries for additional personnel. And additional services the patient gets increase the cost of his care.

Still another factor has an important bearing on cost. More and more people are being hospitalized for medical care, as distinct from surgical or maternity care. Blue Cross statistics show that the length of stay for these medical admissions averages 50 per cent longer. In addition they usually require more hospital services than surgical and maternity cases.

These facts all added up to an upward adjustment in rates if Blue Cross was to continue to provide members with all the essential hospital services they need without a dollar limit.

The only alternative would have been to abandon this basic principle of service benefits at a time when the increased cost and the increased demand for hospital care clearly point to the need for the most protection possible.

The folic acid antagonists have not shown much promise in adults with malignant lymphomas and may be dangerously toxic.

* * *

Urethrane has found much less vogue in the treatment of malignant lymphomas than in chronic leukemia.

* * *

Radioactive phosphorus is seldom of use except in unusually radiosensitive cases of malignant lymphoma and, by repeated use, may dangerously depress the bone marrow.

* * *

Progress in the treatment of malignant lymphomas and leukemias has surely been made in the past five years, and the promise of the possibility of better results should make clear the value of early diagnosis.

* * *

Excess exposure to sunlight may be some sort of sport as yet unclassified, but it certainly is *not* a health-creating measure. It also predisposes some skins to development of cancer.



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The Cardiovascular Surgeons' Club

Organizational Meeting

Of the nineteen charter members of the Cardiovascular Surgeons' Club, sixteen were able to attend the first meeting which began with an operative clinic at the Illinois Research Hospital, University of Illinois, January 16, 1953. A mitral commissurotomy was performed first by Dr. Ormand Julian and this was followed by a resection of a traumatic arteriovenous fistula of the common iliac artery. Dr. William Reichert performed an exploration for biliary atresia in a newborn infant.

The operative clinic was followed by a luncheon at Presbyterian Hospital and an informal presentation of cases in the Presbyterian Auditorium during the afternoon. The material covered included: (1) presentation of cases in which segmental arteriosclerotic blocks of the femoral artery had been resected and treated by venous grafts; (2) angiocardiography in the differential diagnosis of pure pulmonic stenosis and the tetralogy of Fallot; (3) the subjects of anticoagulants in vascular surgery, coarctation of the aorta, aneurysms of the thoracic aorta and frostbite were also discussed.

The wives of the out-of-town members were entertained at a luncheon at the University Club by the wives of the Chicago members.

A cocktail party at the Drake Hotel was followed by an excellent dinner, also at the Drake, during which time the club was organized. The following members were present: Dr. and Mrs. Ormand Julian, Dr. and Mrs. Carl Davis, Jr., Dr. and Mrs. John Olwin, Dr. and Mrs. Egbert Fell, Dr. and Mrs. William Reichert, Dr. and Mrs. Sam Dye, Dr. John Reynolds—all of Chicago; Dr. and Mrs. James Blodgett, Dr. and Mrs. Joseph Witter, Dr. and Mrs. Alexander Blain, III, Dr. Conrad Lam, Dr. Eugene Osius and Dr. Prescott Jordan—all of Detroit; Dr. and Mrs. Robert E. L. Berry and Dr. Francis Gerbasi—of Ann Arbor; Dr. and Mrs. Sherwood Winslow—of Battle Creek.

Members who were unable to attend the meeting were Drs. Wilfred Bigelow of Toronto, Kenneth Campbell of Detroit, and Herbert Sloan of Ann Arbor.

The following items were decided:

1. *Name*—The name suggested by Dr. Conrad Lam, Cardiovascular Surgeons' Club, was adopted.

2. *Purpose*—The purpose of the club, to hold informal clinical meetings, is to be served by two meetings a year, one in January and one in the Fall. The next meeting is to be held in Detroit, if possible, the day before the Michigan-Michigan State football game.

3. *Officers*—The following officers for 1953 were elected: President, Ormand Julian; Vice President, John Olwin; Secretary, Alexander Blain, III; Treasurer, Sherwood Winslow.

4. *Constitution*—Dr. John Olwin was appointed to draw up a brief Constitution for adoption at the next meeting.

5. *Membership*—It was decided that membership should be limited, at least for the present, to twenty-five members. The six remaining vacancies, if possible, are to be filled with applicants outside the states of Illinois and Michigan. President Julian appointed the following Membership Committee: Drs. Joseph Witter, Carl Davis, Jr., and the Secretary.

Each member's share of the cost of the meeting is to be determined by the Chicago members. After the bills are received, Dr. Sherwood Winslow is to be notified of this cost and he will mail bills to those members attending the meeting.

In conclusion, it may be stated that the first meeting, thanks to the Chicago members, was a tremendous success. There appears to be a tremendous enthusiasm for this type of surgical organization and the numerous advantages of membership in the club are obvious. The Michigan members and their wives wish to express their gratitude to the Chicago members for the enjoyable and instructive time and are planning to reciprocate at the Detroit meeting in the Fall.

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Say you saw it in the Journal of the Michigan State Medical Society

The Battle Creek Sanitarium and John Harvey Kellogg, M. D.

For the benefit of our readers, we believe an explanation is in order. Michigan has boasted of many great advances in medicine and medical science. The Battle Creek Sanitarium is one institution exemplifying the advancement of medical knowledge and treatment.

The institution was first organized in the late 1860's. Dr. John Harvey Kellogg came to it as its superintendent in 1878. He was a genius in organization and a far-sighted medical pioneer. He headed the institution for sixty-seven years and soon built it into one of the greatest sanitariums the world had even seen, attracting patients from all over the world, and patients of high rank. In the 1920's, the institution's main building was one-tenth of a mile long, with several wings, and six stories high, accommodating about 1,500 patients and prospering as never before. In the late 1920's a sixteen-story addition was built, which was a magnificent structure. Then came the depression of the 1930's with an enormous new building, accommodations for approximately 2,000 patients, and not too many patients. This long depression and an inadequate number of patients were hard times for the institution, but it was running and paying off its indebtedness for the new structure, gradually.

Then came the war, the Second World War. The Federal Government was looking for hospital facilities for its expanding army. Negotiations brought about the sale by Dr. Kellogg to the government, of the "white elephant" part of the institution, the enormous buildings which had never been fully occupied, and the establishment of what is now Percy Jones Hospital. The Sanitarium moved into a beautiful five-story stone masonry building, which it had in reserve and which it is now occupying together with several additions, and a hospital, half a block away.

The heart of the crushing blow was the announcement, inaccurate but widespread, by Dr. Fishbein, editor of *The Journal of the American Medical Association,* that the Battle Creek Sanitarium had sold out to the Army. This was not true, but was widely believed and is still believed. The institution had sold an enormous and expensive-to-operate building which it could not use, but it had retained several of its old buildings, which it is still using. It has a bed capacity of approximately 300 patients; a staff of five full-time doctors of medicine, and five part-time doctors of medicine. It also has made its facilities available to the doctors in the vicinity, which includes practically all of the members of the Calhoun County Medical Society. The institution is practicing high-grade, modern diagnostic and therapeutic medicine. It is a memorial to the foresight and genius of John Harvey Kellogg, its founder.

We think our membership should know that the Sanitarium is still operating. It suffered the calamities of a long-continued, severe, depression immediately after having expanded its facilities, and the blight of false reporting (which was never corrected) that it had "sold out" to the U. S. Army.

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Michigan Registrations

The following report of examinations and endorsements in Michigan covers the period from August 15, 1952, to January 9, 1953. It lists registration numbers from 20,052 to 20,203, or 152 names. This added to the 262 reported in our December, 1952, JOURNAL indicates a considerable number of new Doctors of Medicine starting practice in Michigan. Additional names will be published as they are received from the Michigan State Board of Registration in Medicine by courtesy of Dr. J. Earl MacIntyre, Secretary.

This listing shows that Michigan has received 114 Doctors of Medicine from outside the State during this period of time, and has licensed twenty-four from the University of Michigan and twelve from Wayne University.

The following graduates registered from the two Michigan Medical Schools:

From the University of Michigan: Howard Edward Comstalk, Jack Frederick Ensroth, Larry H. Birch; Erwin Fay Kercher, Robert Marvin Epstein, James William Mackenzie, Russel Frederick Miller, Suel Andrews Sheldon III, John Arthur Foote, Seymour Stanley Adelson, James Frederick Pingel, Hays Gormley Bowne, Russell Hardy Dean Gillespie, John Lyman Zimmerman, Carl Frederick Trager, Richard Barr Asbury, Paul Hendrich De Vries, Jack Achilles McCris, Norman Baldwin Hodgson, Robert Ogden Reisig, LeRoy Price Houck, David Judson Sencer, Clarence James Lefler, Robert David Woodward.

From Wayne University Medical School: Dwight James Dutcher, Walter K. Kujawski, Joseph Richard Mullen, Paul Gast Firnschild, Arch Herbert Hall, Leo Jeseph Miedler, Donald L. Otto, Armen Shekerjian, Livius Nicholas Stroia, Charles LaVerne Bowers, Robert Luther Willis, Keith P. Moffatt.

From Outside Michigan—James H. Eldridge, *(University of Chicago)*, Theodore L. Bash *(University of Buffalo)*, Thomas H. Cardinal *(Marquette University)*, Ralph Oliver Kennedy *(University of Wisconsin)*, Truman Silver Smith *(Northwestern University)*, Robert B. Allen *(State Univesrity of Iowa)*, John Edgar Prevotte *(Lake Forrest)*, Robert Eugene Merrill *(Ohio State University)*, John Garth Chatterley *(University of Utah)*, Russell Eugene Gibson *(University of Illinois)*, Cody Lane Smith *(Johns Hopkins)*, Norman B. Abell *(Rochester School of Medicine and Dentistry)*, Gerald Anthony LoGrippo *(Medical College of Virginia)*, William E. Conrady *(Jefferson Medical College)*, Henry Tesluk *(Cornell)*, Frederick Locke Clement *(University of Toronto)*, John J. Swihart *(University of Pittsburgh)*, Lorenzo Morelli Pando *(University of National Mayor de San Maree, Lima, Peru)*, Mary Alice Coogan *(Creighton)*, Raoul W. Urich *(Ohio State University)*, Robert Churchill Ackley *(Cornell)*, John B. Burhans *(Northwestern)*, Armin Edward Gutstein *(Harvard)*, Bernard S. Zager *(Northwestern)*, John Michael Malone *(St. Louis University)*, Patrick S. Ferazzi *(University of Virginia)*, William McDonald Follis *(University of Cincinnati)*, John Edward Murphy *(Loyola)*, James E. Henderson *(Western Reserve)*, Kurt Sachs *(University of Vienna)*, Marrion Upshur Scott *(Johns Hopkins)*, Robert Steven Jampel *(Columbia University)*, William Otto Tschumy, Jr. *(Northwestern)*, Francine Larson *(University of Chicago)*, Charles K. Stulik *(Rush Medical)*, John O. Borman *(Jefferson)*, William Staples Boutwell *(Northwestern)*, Jack Hobart Buck *(University of Cincinnati)*, John L. Campiche *(University of Chicago)*, Julien Priver *(University of Western Ontario)*, Mary Elizabeth Furstenberg *(University of Wisconsin)*, Richard Kelly Greenbank *(Medical College of Virginia)*, Paul Stanton Groneman *(University of Utah)*, Clifford William Gurney *(University of Chicago)*, Joseph Francis Guyon *(Marquette)*, William Charles Heitsch *(College of Medical Evangelists)*, Samuel Crawford Houston *(University of Utah)*, Clyde Willard Kurtz *(Northwestern)*, Robert Francis Sly *(Marquette)*, Frederick G. Porter *(University of Iowa)*, Edgar W. Webb *(Marquette)*, James H. Wible *(Pennsylvania)*, Byron Kent Wilson *(University of Utah)*, Malcomb Lowell Crump *(Albany Medical College)*, Gerard William Weber *(Loyola)*, William John Fayen *(Western University)*, Dalton Keats Ross *(Washington University)*, Frank Orlando Spadafore *(Loyola)*, Hubert L. Shields *(Jefferson)*, Milo O. Lundt *(University of Wisconsin)*, Norman Walter Erickson *(Northwestern)*, Willard Biddle Gilman Terry *(Hahneman Medical College)*, Ralph Samuel Green *(University of Utah)*, James Evans Kelly *(St. Louis University)*, Peter Alexander McArthur *(New York University)*, Paul Sheldon Johnson *(Temple University)*, James Chandler Smith *(University of Oregon)*, Vernon V. Bass *(University of Wisconsin)*, John Levinthal *(Drake University)*, John Chesney Carlisle *(Harvard)*, Roger C. Grady *(Stanford)*, Paul Henry Ringer, Jr. *(Vanderbilt University)*, Edward E. Cale *(Tulane)*, William Allen Wiloughby *(University of Colorado)*, Annie Belle Bradley LoGrippo *(University of Virginia)*, Howard S. 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Meat...

and the Weight Reduction Diet in Cardiac Disease

The important relationship between obesity and the outlook in cardiac disease and hypertension is vividly emphasized in a recent publication of The American Heart Association.*

For reasons not entirely understood at present, "heart disease and high blood pressure are more common in overweight persons than in those of desirable weight." The predisposition to atherosclerosis in obesity and the increased physical burden of carrying excess weight are undoubtedly contributing factors. Hence, as this publication points out, weight reduction is the first line of defense in decreasing the incidence of cardiac disease, and in improving the prognosis after cardiac disease or hypertension has developed.

Meat occupies a prominent position in the weight reduction diets outlined in this American Heart Association booklet. This recommendation is in sharp contrast to the erroneous belief held in former years that meat is harmful in hypertension or cardiac disease. "There is no evidence that red meat or any other form of protein in moderation has any adverse influence on blood pressure."

The magic formula for reducing is simply "Eat less." Two types of diets are outlined. One "allows moderate amounts of meat and other proteins, small amounts of fat and moderate amounts of carbohydrates." The other is "high in protein with plenty of meat, eggs and cheese, moderate in fat and low in carbohydrates." Diet No. 1 provides 70 Gm. of protein, 60 Gm. of fat, and 120 Gm. of carbohydrate; caloric yield, 1,300. Diet No. 2 provides 100 Gm. of protein, 80 Gm. of fat, and 60 Gm. of carbohydrate; caloric yield, 1,360.

The inclusion of generous amounts of meat in these diets—12 to 16 ounces of cooked meat or two substantial servings each day in Diet No. 2—is a reflection of the important role meat plays in any weight reduction regimen. It is generously included because of its high content of protein of excellent biologic value and because lean meat contains unobjectionably small amounts of fat.

—

*Food For Your Heart, a Manual for Patient and Physician, Department of Nutrition, Harvard School of Public Health, Harvard University, The American Heart Association, Inc., New York, 1952. Copies available through local Heart Association.

The Seal of Acceptance denotes that the nutritional statements made in this advertisement are acceptable to the Council on Foods and Nutrition of the American Medical Association.

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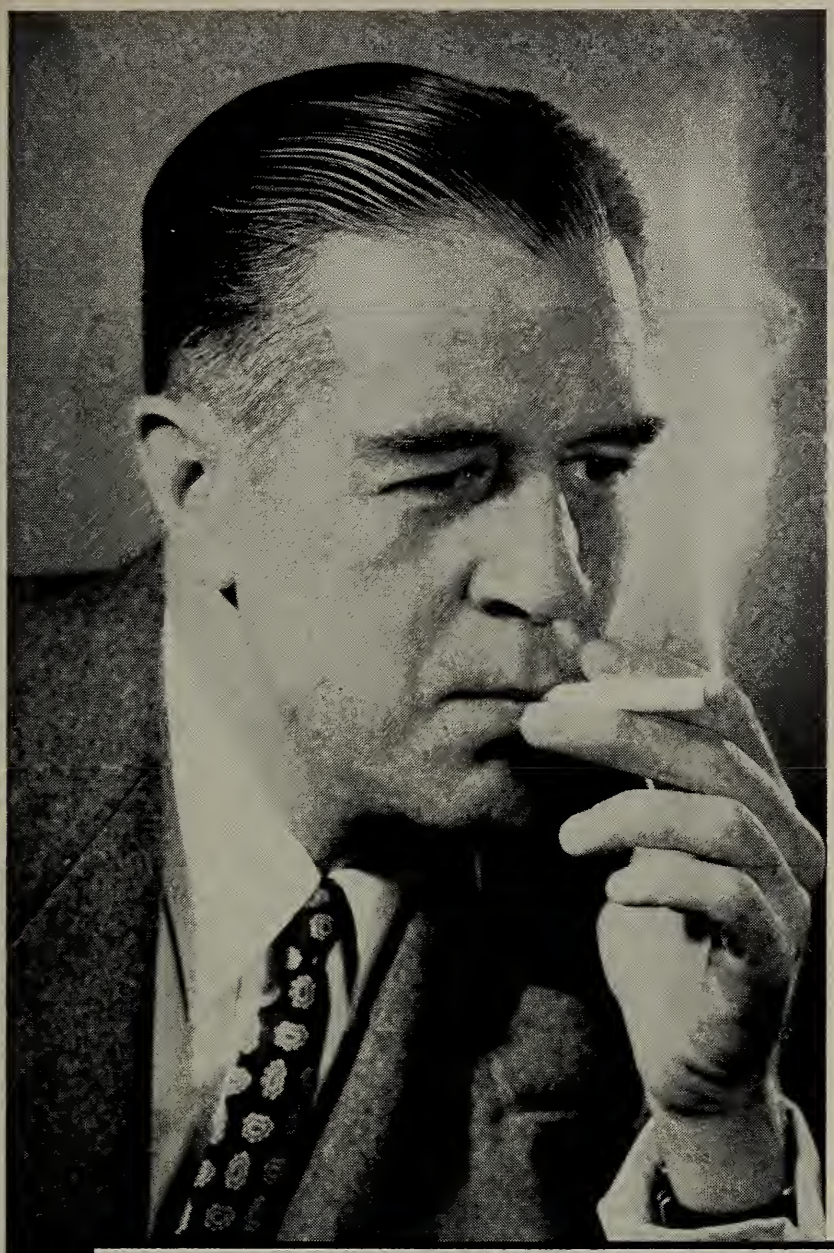
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Editorial Comment

VITALITY YARDSTICK NEEDED

Dr. Charles E. Dutchess, medical director of Schenley Laboratories, Inc., has declared that the present practice of measuring competence by chronological age is outdated and must be replaced. We agree.

"Unless we develop accurate tests for determining true biologic age or vitality," he said, "we shall be failing in our duty to help solve the increasingly complex problems of a steadily growing aging population."

Compulsory retirement at the age of 65 is working injustices on many persons who are mentally and physically capable of continuing their work and who want to stay on the job.

In addition, business firms and the Nation are being denied the experience, leadership and expert workmanship of an increasingly large segment of the population because of hard and fast rules regarding retirement.

By 1980, it is estimated there will be 20,000,000 persons 65 years or over in the United States. Certainly, for their own health and sense of "being useful," and for the well-being of the Nation, any method of determining which workers are capable of carrying on after 65 will be of inestimable value in the years ahead.—*Detroit Free Press,* Nov. 28, 1952.

FIFTY THOUSAND LIVES SAVED IS SOME RECORD

Those who keep track of such things report that last year for the fifth time since 1947 more than 3,500,000 babies were born in the nation. The total is estimated at 3,875,000 and is considered "rather unexpected in view of the national decline in marriage rates since 1946."

What the statisticians meant to say was that a great many more families than had been expected were having second, third, or even fourth children. They call it "a change in attitude as to the ideal size of the family."

All this is to the good. No couple can expect to perpetuate the family name with fewer than three children even today. A century ago, it took at least eight children to accomplish this, what with the diseases of infancy and childhood, the epidemic diseases and the great plagues.

This brings up the most startling of all the facts about last year's newborns. At least 50,000 of them would not have survived their first year, a scant decade ago.

That's a fact. Infant mortality rates in this country have been making more spectacular declines than the birth rates have been making gains. Much is said in sentimental affection for the old-time family doctor and his ally, the midwife. But they never in all their devotion to mothers could have dreamed that infant mortality would be held to a rate of 28 per 1,000 live births in the nation as it was last year.

And while we're handing out bouquets, let us not forget that the infant mortality rate here in Calhoun county was only 27.6 per 1,000 of live births in 1951. When figures for 1952 are all in, the latest record may be even lower. This is life-saving at its best, where a whole life lies before the one who is saved.—*Battle Creek Evening News,* Jan. 9, 1953.

HUMILIATING

Time's story of crooked doctors in California's Physicians' Service is truly embarrassing. Every time a single member of the medical profession is found guilty of wrongdoing, the profession as a whole suffers untold damage.

That only a few of the 11,500 participating physicians were found guilty of abusing or overusing the service does not remove the blot from our treasured escutcheon. Neither are we absolved by suggestion that this is only a sign of the time; the natural result of the existing socio-economic confusion; or the impersonal relationship with blunted sensibilities and atropy of conscience.

With Dante's purgatorial allegory in mind, let us resist the sin that shames us and admit the light that eradicates the evil disposition ever ready to tempt us.

We can only pray for power to live with a clear conscience and to die with clean hands.—Editorial, *Journal of the Oklahoma State Medical Association,* January, 1953.

"SOCIALIZED" MEDICINE OUT—MRS. HOBBY

Federal Security Administrator Oveta Culp Hobby said Sunday that during the Eisenhower Administration "there will be no socialized medicine, as it is popularly known."

Mrs. Hobby, interviewed on CBS' "State of the Nation" television program, said the question on "socialized medicine" was "a very easy one to answer."

"The Republican Party's platform and many of the speeches during the campaign took a very clear position, and the President's position is very clear," Mrs. Hobby said.

She added, in answer to further questions, that

(Continued on Page 258)

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"SOCIALIZED MEDICINE OUT—"

(Continued from Page 256)

the Republican ban on "socialized medicine" does not apply to research and development such as the FSA medical departments are carrying on.

She said that she did not think any program under the FSA would destroy self-reliance in individuals, and believed FSA programs were "designed to help people help themselves."—*Detroit Free Press,* February 16, 1953.

MOST PEOPLE NEED NO AID TO PAY THE DOCTOR'S BILL

A study published recently in U. S. News & World Report dealt with medical bills owed by people in the country at large. It was based on figures gathered for the Federal Reserve Board by the Survey Research Center of the University of Michigan.

Of about 53,000,000 families in the United States, almost 43,000,000—over 80 per cent—reported no medical debts whatsoever. Whether they had been ill within the stated period is not a matter of record. If so, they must have paid cash —lucky doctors—or benefited by free treatment or had some kind of insurance coverage like Blue Cross-Blue Shield.

One million families owed from $200 to $1,000, while another 200,000 owed more than $1,000. That would indicate that less than 3 per cent of all the people in the survey were in more or less serious trouble as the result of illness or an operation.

The remaining 9,000,000 families were listed as in debt for medical expense in amounts varying from $1.00 to $200. Unpaid bills are always bothersome, but it would be interesting to have a comparable analysis of how much people owe corner grocers, department stores or finance companies.

The point is, on the facts as shown, 80 per cent of people surveyed have no medical debts at all, while another 17 per cent have medical debts that ought to be entirely manageable within the family budget.

But, for those who advocate socialized or government or political medicine, it is necessary to turn the problem upside down. The dark side of things is their specialty, and the 3 per cent must be described as the norm, in order to justify the infliction of another expensive bureaucracy on the suffering taxpayer. Any other way of helping the people who really need help is dismissed as half measure.

This business of reversing any sensible approach to the relations of the people and their government was spotted long ago by Grover Cleveland. That sage remarked that it was the business of the people to support the Government and not of the Government to support the people.

As far as the medical-debt problem goes, there is nothing in the record to justify any all-out intervention by Washington officials along the lines of the British National Health Service.—Reprinted by special permission of *The Saturday Evening Post.* Copyright 1953 by the Curtis Publishing Company.

TAXES

Taxes have set a new high. We provided $19,530,000 for income taxes for the six months, compared with $12,729,000 for the same period last year. At this rate, our tax bill was roughly three times what we paid in dividends and nearly two times our net earnings.

Included in our tax bill were $3,224,000 for excess profits taxes. General Foods pays a tax of 82 per cent on everything it earns in the United States above $36,000,000 annually, or $18,000,000 figured on a six-month basis.—*GF Stockholder News* Dec. 3, 1952.



HUBBELL & HUBBELL

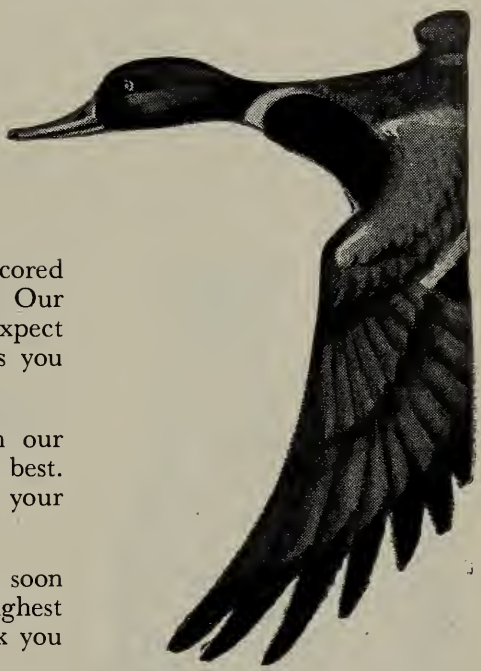
The above photographic study of R. J. Hubbell, M.D., Kalamazoo, President of the Michigan State Medical Society, was made by Constantine L. Oden, M.D., of Muskegon, Michigan, an old friend. Dr. Oden takes his photographs with a Rolleiflex, using a Strobe light at 3000th of a second. This produces a normal negative from which he may make a normal print; however, to use Dr. Oden's words, "The fun comes in the processing of the prints—by manipulation under the enlarger where it is possible to make any kind of a distortion desired; it works on the same principle as the mirrors—horizontal, vertical, or any kind of distortion can be obtained by printing, holding the paper at different angles, tilting the enlarger and so on."





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PRACTICAL NURSE TRAINING PROGRAM STUDIED

A comprehensive study of the Practical Nurse Training Program was announced January 29, 1953, by Dr. Lee M. Thurston, State Superintendent of Public Instruction. The study, suggested by the State Advisory Committee for Practical Nurse Education, is the result of co-operation among the W. K. Kellogg Foundation, the University of Chicago, and the Michigan Department of Public Instruction, as well as other individuals and agencies.

Goals for the project include the determination of strengths and weaknesses, the development of suggestions for program improvement, the organization of criteria for evaluation on a continuing basis, and the provision of a basis for studying programs in other states. Findings of the study, as well as the evaluation techniques, will be made available to other states which have similar programs.

Professional and practical nurses, physicians, educators, hospitals, public health nursing agencies, convalescent homes, and related organizations will all participate in this evaluation which will continue through June 30, 1953.

This study will confine itself to the operation of the Michigan Practical Nurse Training Program during the last five years. Schools of practical nurse training in eight communities will be involved. These include Ann Arbor, Battle Creek, Detroit, Flint, Grand Rapids, Lansing, Marquette, and Traverse City.

THREE CHALLENGES OF THE FUTURE

It is a common failing to become so preoccupied with the present that the perspective for the future is lost. Thus, it is wise occasionally to consider some of the social and economic trends that are occurring, because they can affect the future of medicine. In some way they will affect the life of every physician. In scanning the horizon, one can see immediately three important challenges of the future. They are the changing meaning of socialism, the effect of aging on the voting population, and the need for voluntary health insurance to serve an aging population. These problems are interrelated and are of much concern to physicians as citizens and as practitioners.—Editorial *The Journal of the American Medical Association,* January 17, 1953.



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Some Aspects of the Cancer Problem in Michigan

By R. J. Hubbell, M.D.
Kalamazoo, Michigan

IT IS my privilege and pleasure to welcome you to this, the Fourth Michigan Cancer Conference. These conferences from their inception have been organized and sponsored by the Cancer Control Committee of the Michigan State Medical Society, the Michigan Department of Health and the Michigan Division, American Cancer Society.

Previous conferences have proved their worth by the increasing number who attend each succeeding one and as I look over this audience, I am certain it is one of the largest attending these meetings.

There must be a reason for this, and as I compare today's program with those preceding, I find that each one has been full of practical and useful discussions of real value to those who attended. The slogan of today's program is "Health Investment Day," and I am sure you will find the time spent here will pay dividends in the knowledge you will acquire about self-protection against cancer.

Some say that cancer education, especially cancer education of the public, is being overdone; that the public is being unduly aroused about this problem. The cancer death rate, that is, the number of such deaths per hundred thousand population, in Michigan and throughout the country is increasing year by year. This causes one to ask that if the lay education program were effective, would not this trend be reversed? What few signs there are of a decreasing death rate in one or two types of cancer, only emphasize the great necessity of redoubling education efforts to make it a reality in all types of the disease.

National and local surveys have shown that only about half of the public knows any useful facts about cancer and how these facts should be used for self-protection. Until this percentage of informed people is materially increased no one can truthfully and logically maintain that lay cancer education is being overdone.

Education undoubtedly has saved individual lives; it has not yet made any appreciable impression on the masses. Had it done so, the death rate might be decreasing rather than increasing. Under these conditions, I would urge a more intensive and better co-ordinated education program to reach every citizen of Michigan of high school age and over.

In the light of present knowledge, the greatest hope for the control of cancer lies in its discovery in early stages of development and prompt and proper treatment. The fact that the great majority of cancers are in an advanced and incurable condition when first seen by a physician lends added emphasis to the need for educational efforts to bring the cancer patient to his physician in much earlier stages of his disease. The cancer detection examination is a practical approach to the solution of this problem, but a very much greater number of people will have to take advantage of it before the death rate is lowered to any extent.

The cancer problem has been actively before the people of Michigan for the past fifteen years. In its early years, the attack was handicapped by lack of funds to implement an effective education and control program. This handicap no longer exists and it seems reasonable to hope and expect that with several hundred thousand dollars now

Presented at the Fourth Michigan Cancer Conference, Lansing, Michigan, October 9, 1952.

available for cancer control annually in this state it will be used to best advantage in influencing the death rate in a favorable manner.

With full appreciation of all that has been accomplished, I feel there should be a frank evaluation of Michigan's cancer control program and what it has accomplished to date. As president of your state medical society, I am urging its Cancer Control Committee to re-study the cancer problem in this state in co-operation with the two Michigan Divisions, American Cancer Society, and the Michigan Department of Health, in order to see if a more effective program of cancer control cannot be developed.

The Michigan State Medical Society is carrying on a continuous cancer education program among its members. Monthly or oftener, some cancer education material is laid on the desk of every member. Through financial assistance of the Michigan Health Department, a bimonthly cancer publication reaches every Michigan physician and hospital library. A page in each issue of the JOURNAL of the Michigan State Medical Society is devoted to discussion of some cancer problem of importance to the medical profession. One issue of the JOURNAL annually is devoted to cancer in which the papers given at this Conference appear. Every physician is urged to make his office a cancer detection center for his own patients. Only by this plan can any appreciable percentage of the public enjoy the protection that a cancer detection examination gives. The Michigan State Medical Society hopes to see the principle of the Hillsdale Plan or similar plan for Tumor Detection in action in every county in Michigan as soon as possible.

The Cancer Control Committee recently prepared and distributed to each local medical society a brochure on "The Role of the Cancer Committee of the County Medical Society in Cancer Control." This pamphlet outlined in some detail the cancer problem in local areas and the part the medical profession should take in its study and control. Local health officers and many of you also received copies and we hope that in co-operation with your local medical and health organizations you are planning an effective cancer control program.

The Cancer Control Committee, with the assistance of the Michigan Department of Health and the Michigan Division, American Cancer Society, has published and distributed to the high schools of Michigan a manual of information about cancer that should be of value in presenting the subject to health classes and other interested students. Each year many thousands of students enter Michigan high schools and when properly taught at this age, they are able without fear to understand the cancer problem and how it may affect them. They should not have to wait another ten, twenty or thirty years to learn these basic facts, for by that time it will be too late for many of them to profit from this knowledge. To meet this need of the high school population, the cancer manual was prepared.

The above are a few of the more important special activities of your state medical society in the cancer education field.

Hopeful information is coming from the hundreds of research laboratories now concentrating their efforts on finding out more and more about the causes of cancer and more effective methods of treatment. From the Metropolitan Life Insurance Company comes the statement that "Some encouraging signs are already evident in the postwar record of industrial policyholders. A comparison of death rates for 1945-47 and 1949-50 shows reductions in mortality from the malignant neoplasms among white females at ages twenty-five to seventy-four years. For the accessible sites as a group, both sexes experienced declines in mortality, white men by 2.4 per cent and white women by 7.2 per cent. Both sexes were favored with reductions in mortality for such specific sites as the stomach, the intestines and duodenum, the rectum and anus, the liver and biliary passages, and the bladder." Unfortunately the fantastic claims made in many newspapers and magazines about new cancer discoveries raise false hopes in the minds of the public and cancer sufferers and tend to confuse the true picture of progress being made in unraveling the secrets of this disease.

We are all concerned with this elusive problem that may touch the life of any human being. Therefore, it is well to pause on occasions such as this and learn something more of our responsibilities for our own protection and that of our friends and neighbors who are unable to share this meeting with us today. In again bidding you a hearty welcome to this Fourth Michigan Cancer Conference it is my hope you will feel well repaid for the time and effort spent in being here.

The Present Status of "Cancer Tests"

By Freddy Homburger, M.D.
Boston, Massachusetts

SIGNIFICANT advances have undoubtedly been made in medicine's fight against cancer, particularly in the past decade. Yet, everyone concerned with the day-to-day problems of cancer detection and treatment is dissatisfied with our present methods and recognizes the need for still further progress.

The most modern refinements of the effective methods now available for the treatment of cancer, radical surgery and radiotherapy are, after all, merely ancient techniques known to have been employed by the old Egyptians who cut out and burnt out neoplasms. "Cure him with the knife and then burn him with fire so that he will not bleed too much."[1]

Radical surgery is today approaching its limits set by the ability of the human body to survive the degree of mutilation often necessitated for cure of neoplasms, and radiotherapy is limited by the threshold of radioresistance of normal tissue.

The salvage rate of surgery and radiation, however, could still be markedly increased by shortening the time interval between the appearance of a cancerous lesion and the application of the proper method of treatment.

This can be brought about by intensified education of the lay population, as well as of the physicians who see the patient first. Further, rapid and striking progress is certain to result in this field from the development of better methods for the early and reliable detection of cancer. Such a discovery would increase the cure rate tremendously even granting the assumption that present-day methods of treatment could not be further improved.

From the Cancer Research and Cancer Control Unit, and the Departments of Medicine and Surgery, Tufts College Medical School, Boston, Massachusetts.

The studies on which this review is based were supported (in part) by funds from the National Cancer Institute, National Institutes of Health, Bethesda, Maryland; an institutional grant of the American Cancer Society, New York; grants-in-aid from the American Cancer Society, Massachusetts Division; the American Cancer Society, New York, upon recommendation of the Committee on Growth of the National Research Council; and the Medical Research Foundation of Boston, Inc.

Presented at the Fourth Michigan Cancer Conference, Lansing, Michigan, October 9, 1952.

Minimal Requirements for Diagnostic Tests

Diagnostic methods have to fulfill varied functions in the field of cancer management.

Screening Tests.—There is needed a reliable screening test that would detect the individual with cancer early among any given group of people without symptoms.

Differential Diagnostic Tests.—For the solution of differential diagnostic problems there should be available tests that could indicate the nature (malignant or not) of any suspicious lesion or symptom.

Tests Measuring Tumor Activity.—In order to obtain "advance information" on the recurrence of operated or irradiated neoplasms and in order to gauge the effects of palliative chemotherapy, simple and reliable measures of cancer activity are needed.

Depending upon the special purpose for which a cancer test may be intended it would have to satisfy different criteria. In order to be useful for any *one* of the three main purposes outlined above, it would have to possess the following basic requirements:

1. It has to be reproducible. That means that the same results will be obtained on one and the same sample of biological fluid by different technicians, in different laboratories. It also means that if different samples are obtained in one and the same patient at different times, the same or different technicians should obtain similar results.
2. The procedure has to be simple and such that it can be carried out reliably and economically in any good clinical laboratory.
3. The test must be sensitive, i.e., it should preferably detect even latent or early cancer, and it must be specific, i.e., it should not be affected by any conditions other than cancer, or at least only by those that could easily be ruled out by conventional clinical methods.

Specific Uses and Requirements

Assuming that these minimal requirements are fulfilled by any given procedure, then it will have to possess additional more specific attributes depending upon the particular purpose for which it may be intended.

To be useful as a population screening test in the detection of cancer in unsuspected individuals, a test must give less than 5 per cent false positive

reactions and it must detect at least 90 per cent of those cancers that could be found by other methods. This is readily understood when one considers the calculations of Dunn and Greenhouse of the National Cancer Institute[2] who derived the above minimal requirements for screening procedures by estimating the results that could be theoretically expected in the screening of a town of 100,000 people, confining the screening to those over thirty-five years of age. With a procedure that would reveal all cancers correctly and give 1 per cent false positive results, 650 individuals would be screened out as positive. Of these only one half would have cancer. With a screening test yielding 5 per cent false positives applied to the same community, there would result 2,000 individuals with positive tests, only one out of nine of these with actual cancer, all of them, however, requiring thorough work-up to rule out cancer. Figure 1, taken from Dunn and Greenhouse, illustrates this situation. It also shows that if one selects the end point of any given procedure to suit the above requirement of 5 per cent false positive tests, one naturally may

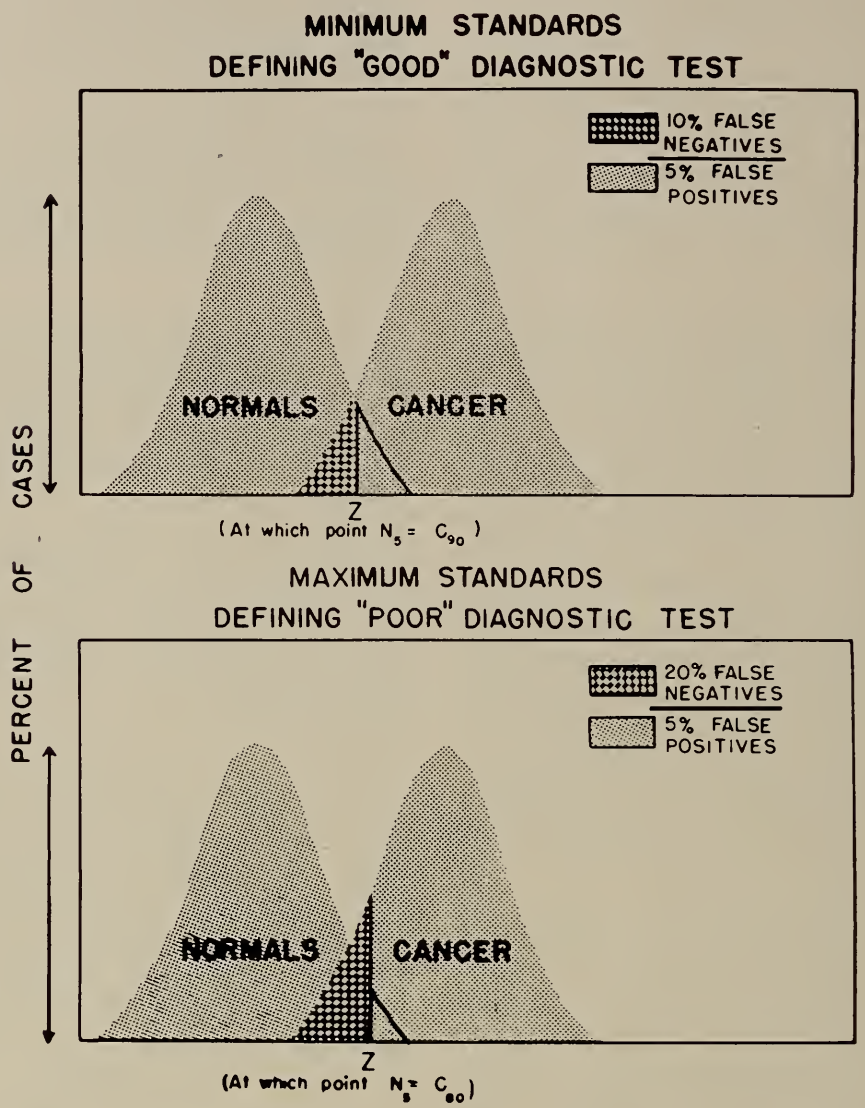


Fig. 1. (Fig. 2 and 3 of Dunn combined.[2]) This shows schematically the difference between a "good" and "poor" diagnostic test for the purpose of population screening. The Abscissa represents test results and the Ordinate the frequency of various test values in normal and cancerous individuals. In the case of a "good" test point Z which gives 5 per cent false positives (N_5) in the normal group also gives 90 per cent (or more) true positives (C_{90}) in the cancer group. In the case of a "poor" test point Z which yields 5 per cent false positives in the normal group will only yield 80 per cent true positives (C_{80}) in the cancer group.

reduce the sensitivity of the test, which will then yield more false negative results.

In the case of a test intended not for screening of populations but rather for the differential diagnosis of cancer in suspicious cases, the requirements will be different. In this case specificity counts most. An example for that type of "diagnostic test" is the acid phosphatase[7] of serum which is elevated in cases of cancer of the prostate, provided the tumor has grown beyond the prostatic capsule and phosphatase reaches the blood stream. Even in cases of metastasizing cancer of the prostate however, only some 75 per cent will show elevated acid phosphatase levels. This means that this test is highly insensitive. Nevertheless, it has great clinical usefulness if properly interpreted, since it is highly specific. No known disease process besides carcinoma of the prostate will cause increased serum acid phosphatase levels. In males without cancer of the prostate such high levels can only be produced by prostatic massage preceding the test, and in the absence of this must be considered evidence of prostatic carcinoma when consistently found.

The third type of application of diagnostic cancer tests, their use as a means to gauge "cancer activity" is also best illustrated by the changes occurring in serum acid phosphatase activity in the course of chemotherapy of carcinoma of the prostate as illustrated in Figure 2. For this purpose a procedure need not be specific as long as one knows its limitations thoroughly, and the most important requirement is sensitivity that reflects any change in the rate of tumor growth.

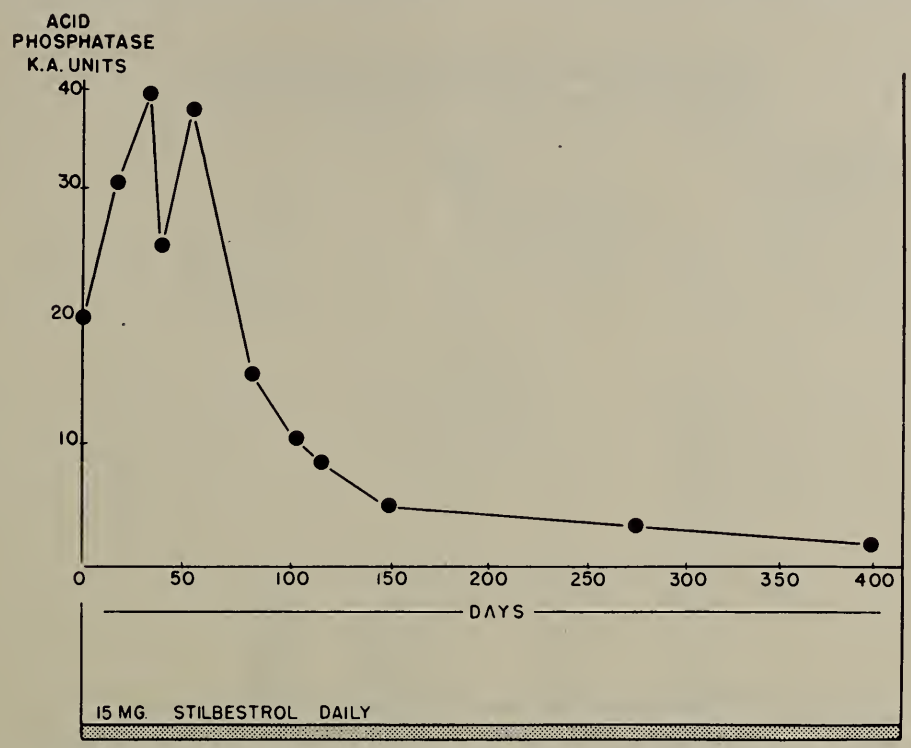


Fig. 2. Changes of the serum acid phosphatase in a case of metastatic carcinoma of the prostate treated with estrogen. The drop of acid phosphatase occurring during this treatment corresponded to reduced tumor activity which was also reflected by clinical improvement. It must be remembered, however, that this ideal correlation between clinical and serum acid phosphatase does not exist in every case.

If one reviews all the laboratory procedures proposed as diagnostic tests for cancer (excepting biopsy and x-rays) and attempts to determine which ones fit the requirements outlined, one arrives at the following estimate of *useful* procedures:

1. (a) Procedures useful for general population screening: none.
   (b) Procedures useful for screening for specific tumors:
   Cytology (Papanicolaou) for carcinoma of cervix.
   Occult blood in feces (gastrointestinal cancer).
   Detection of hematuria (genitourinary cancer), hematology (leukemia).
2. Procedures useful for differential diagnosis:
   Serum acid phosphatase (carcinoma of prostate).
   Serum alkaline phosphatase (osteogenic sarcoma).
   Bence-Jones Protein in blood and urine (multiple myeloma).
   Adrenal steroids in urine (adrenal tumors).

Pituitary or chorionic follicle stimulating hormone in urine (testicular tumors).
Selective localization of radio-iodine (thyroid tumors).
Melanin precursors in urine (melanoma).

In working with more complicated biochemical systems one encounters even greater difficulties. The use of enzyme studies seems a logical field for the development of diagnostic procedures,[3] since

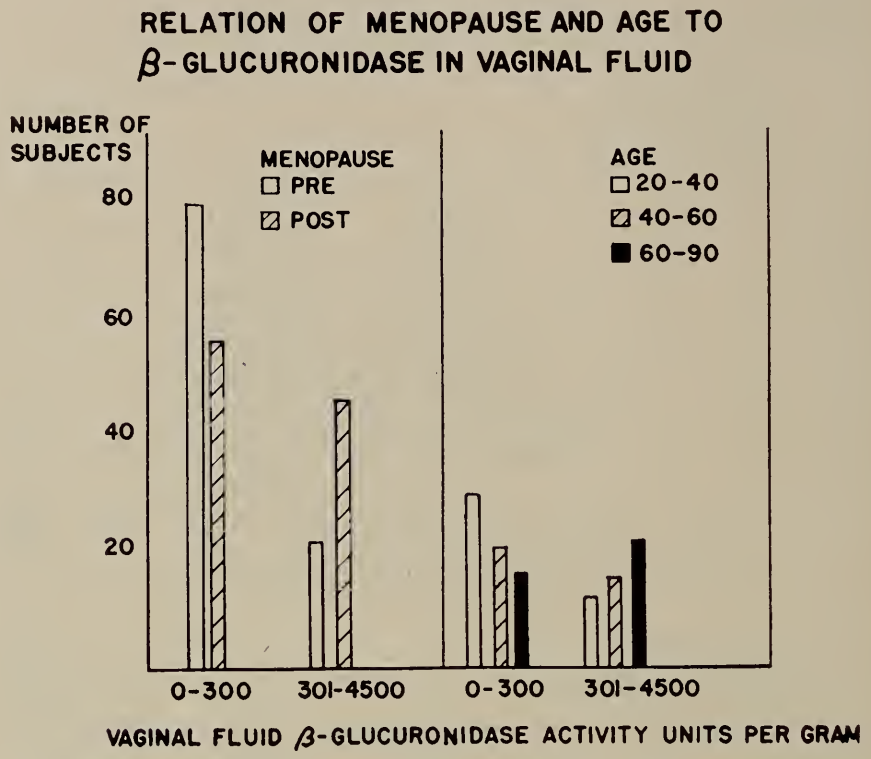


Fig. 3. Beta-glucuronidase activity in vaginal fluid of women with respect to age and ovarian activity.[4]

Disturbance of clotting mechanism of blood (pancreatic tumors).
Deficient enzyme levels in pancreatic juice (pancreatic tumors).
Gastric analysis (stomach tumors).
Cytology (tumors of gynecological, respiratory, intestinal and urinary tract).

3. Procedures particularly useful for estimate of tumor activity:
Acid phosphatase of serum (carcinoma of prostate).
Hematology (leukemias).
Radio-iodine uptake (thyroid tumors).

Technical Difficulties

The difficulties that tend to cloud the accuracy of even the most simple diagnostic procedure are illustrated in the case of the detection of occult blood in feces.[9] The results vary widely not only depending on the reagents employed, but they are also altered by the physical state of the patient's nasopharynx, mouth and gums as well as by the food eaten prior to testing. Assuming that all these factors be well controlled, the significance of a positive finding still remains to be interpreted in the light of clinical judgment.

acid phosphatase and alkaline phosphatase have been found to be of great aid in the study of cancer of the prostate and bone, respectively. Unfortunately, various enzyme concentrations in tissues tend to be low in the case of neoplasms. The exceptions to this are the elevated alkaline phosphatase in osteogenic sarcoma, the increased acid phosphatase in cancer of the prostate, the zymo hexase in most neoplasms and the increased activity of beta-glucuronidase in the majority of neoplastic tissues wherein this enzyme has been studied. In the case of zymo hexase, extensive experimental studies indicate that tumors have to reach huge size before elevated enzyme levels may be expected in blood or secretions.

Beta-glucuronidase has been advocated as being of use in the discovery of cancer of the cervix.[8] This enzyme is particularly attractive for the possible development of a diagnostic test because it can easily be determined in tissues and biological fluids by the colorimetric method of Fishman. This is based on the measurement of phenolphthalein

in a buffered system wherein phenolphthalein is being split from its glucuronide by the action of beta-glucuronidase. The intensity of the color developed at the required pH is proportionate to the intensity of the enzyme activity present. Extensive fundamental and clinical studies on beta-glucuronidase have been conducted at the Cancer Research and Cancer Control Unit of Tufts Col-

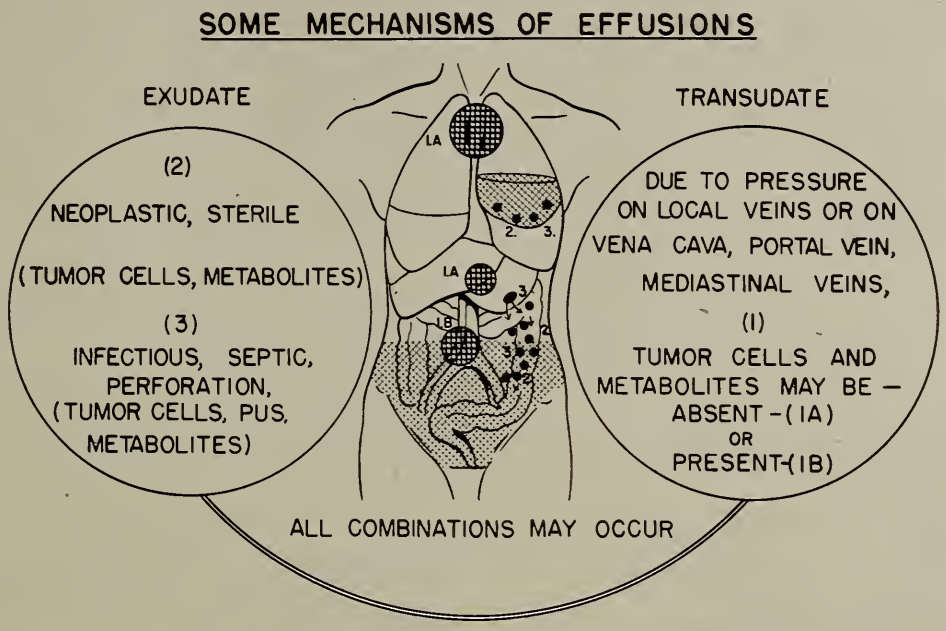


Fig. 4. Some of the mechanical factors that cause neoplastic abdominal or pleural exudates to vary considerably with respect to the tumor metabolites they contain. Depending on the site of tumors causing exudates or transudates, the constituents of such fluids will be different. A transudate, fluid passing into the body cavity because of vascular stasis, may still be caused by a neoplasm, compressing veins and lymphatics without coming in contact with the fluid accumulating. The fluid being exudated around a tumor and by definition rich in tumor metabolites, may be progressively diluted as tumor causes transudation secondary to vascular stasis (see Fig. 5).

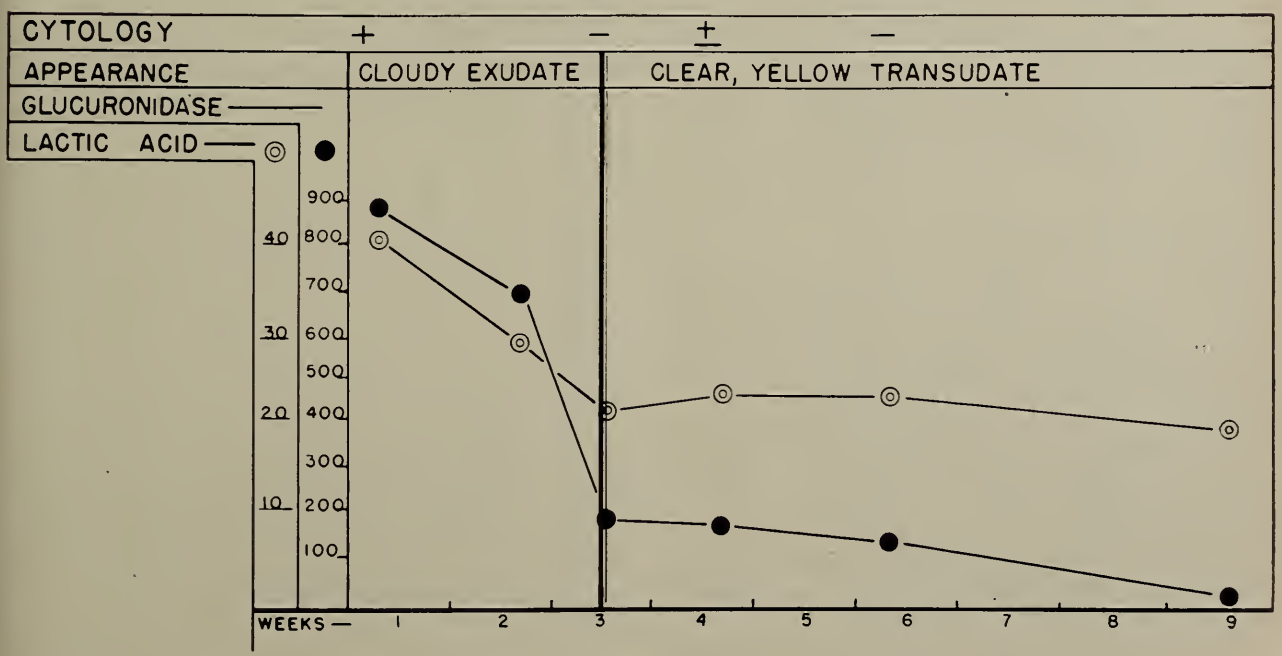


Fig. 5. (From Reference 8) Showing the transformation of an exudate with positive cytology and chemistry into a transudate with negative findings while the patient's tumor grew, leading to her death.

TABLE I. LIST OF PROPOSED "CANCER TESTS"

Morphological Techniques

*Cytology
Blood morphology
Patterns of blood drop

Tests Based on Urinary Constituents

Decoloration of redox dyes
Lactic acid
Sulfur
Reduced riboflavin excretion
Changes in ascorbic acid excretion
Clotting effects on blood
*Gonadotropic assay
Roffo's "gonadotropin"
Beard's "gonadotropin"
Aron's "adrenotropin"
Abortive factor
Lethal factor
"Oxyproteic acid"
Aromatic substances

Chemical Changes in Blood

K, Mg. and Hb liberated by blood clot
Fats and lipids, saponification values
Sedimentation rate of r.b.c.'s
Hydrophile albumin
Protein precipitation tests in plasma and serum using:
  Copper acetate
  Tannic acid and carbol fuchsin
  Sodium vanadate
  Sodium vanadate and heat (56°) C.
  Magnesium chloride
  Citric acid and potassium iodide
  Nitric acid
  Distilled water
  Ricinoleic acid
  Hydrochloric, acetic, and sulfosalicylic acid
  Nitrochloraldehyde
  Heat
  Heat coagulation prevented by iodoacetic acid
  Gelification of blood by lactic acid
Lecithin precipitation
Electrophoretic changes of blood proteins
Mucoprotein
Proteoses
Congo red absorption
Neutral red changes
Surface tension of serum
Decoloration of redox dyes

Chemical Changes in Body Secretions

Stomach juice
  Decoloration of methylene blue
  Physical chemical study
  Achlorhydria
  Lactic acid
Effusions
  Glycolysis (lactic acid)

Immunological Changes

"Defense proteases"
Urinary antigen against Aron's "adrenotropin"
Cytotoxins
Hemolysins
Cytolysins
Antibody fixation by guinea-pig serum
Fixation of complement
Skin test with "cancer fatty acid"
Inhibition of growth of tissue cultures

Enzymological Changes

*Acid phosphatase
Effect of zinc ions on alkaline phosphatase
Glucuronidase in body secretions and tissues
Enzyme inhibitors
Peptidases
Hemolysins
Proteolytic enzymes
Antifibrinolysins
Lipase
"Pentolysine"

*Tests having any practical use at present; these only in specific types of cancer. These procedures have all been critically discussed in Reference 9.

lege Medical School, and have revealed many factors besides cancer that can influence the levels of enzyme activity in biological systems. Thus, in animals, beta-glucuronidase activity of various organs is regulated by genetic factors, and this is also true of the response of enzyme activity to stimulation by sex hormones.

Studies of the vaginal beta-glucuronidase in women without cancer soon revealed that age, ovarian activity and a number of extraneous factors tend to alter the enzyme activity in the vagina (Fig. 3). If an arbitrary dividing value between "normal" and "cancer" values were accepted for vaginal beta-glucuronidase, as had been proposed by Odell, then in the light of the Tufts studies most healthy women over forty, or beyond their menopause, would fall into the "cancer" category.

These sobering results obtained in extensive studies and under carefully controlled conditions show the difficulties that may be encountered when a biochemical procedure is thoroughly investigated regarding its potential use as a diagnostic test for cancer.

It has also been found[4] that beta-glucuronidase activity in pleural and peritoneal exudates, measured simultaneously with cytological examination of these fluids, was markedly elevated exclusively in exudates containing cancer cells. However, many fluid specimens containing such malignant cells nevertheless showed low (normal) glucuronidase values. This indicates that, even in such a metabolically inactive pool as an abdominal or thoracic fluid collection, many factors may interfere with the concentration of biochemical substances that might theoretically be useful for the diagnosis of cancer (Figs. 4 and 5).

In such body fluids as blood or urine, where the mechanisms of homeostasis play an important role,

the chances of some biochemical characteristic to become a consistently reliable index of the presence of cancer are thus infinitely small.

In spite of these evident considerations, a large number of various procedures have been proposed as "diagnostic tests" for cancer. Some of these are listed in Table I. Only those bearing an asterisk have withstood the test of careful evaluation and have retained some usefulness as diagnostic tools that may aid in the detection of certain specific types of cancer. None of these procedures are of any use in the general screening of populations for the presence of cancer in unsuspected subjects.

The abundance of "diagnostic tests for cancer"[6] that have proved to be failures indicates the need for caution on the part of the physician faced with the problem of diagnosis of cancer before he accepts any new "test." The implications arising for the patient from false results, negative or positive, of such cancer tests are extremely serious. It is precisely because of the tremendous clinical importance that any reliable cancer diagnostic test would have that sound scientific judgment often has left the investigator who felt that his studies possibly had resulted in a procedure that might become a useful "cancer test." This field of medical research has become a graveyard for many a scientific reputation, and a source of great insecurity and confusion for the practitioner of medicine and surgery.

It is unlikely that a cancer test for the screening of populations for all types of those diseases now commonly referred to as "cancer" will ever be found. It is far more likely, however, that eventually more clinically useful biochemical or biological methods will be developed that can be of help in the detection of certain specific types of neoplasms and in the differential diagnosis of certain tumors as well as for the early detection of recurrences following therapy.

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Cancer Morbidity Records

By Matthew H. Griswold, M.D., Dr. P.H.
Hartford, Connecticut

THE CANCER record register maintained by the Connecticut State Department of Health is an integral part of the cancer control program in that state. It consists of abstracts of the hospital histories of all cases of cancer, ward, semi-private or private, treated in thirty-one of the thirty-six general hospitals. These thirty-one hospitals contain over 94 per cent of the existing general hospital beds. Of the thirty-one hospitals affiliated with the register, twenty-seven operate cancer clinics with the aid of state subsidies. These clinics are strategically located as regards population density. The record register now contains the histories of some 55,000 individuals, collected since January 1, 1935.

The analysis of morbidity records can supply information concerning the extent of the cancer problem in the area covered by the register, or subdivisions of that area, such as counties, towns and cities. Whether the disease is on the increase or is being controlled may be determined, as well as what methods of treatment give the best results. Incidence, prevalence and survival rates can be obtained, not only in gross figures, but by years, age groups, sex and site in its finer breakdowns. The endemiological study of cancer is dependent upon adequate morbidity records.

In addition to the more general, public health type of information already mentioned, the register provides a starting point for special clinical investigations of particular interest to the medical profession.

These clinical studies may be accomplished in several ways, and have so far taken the form of co-operative projects between the medical profession and the Division of Cancer and Other Chronic Diseases.

The Association of Connecticut Tumor Clinics, a group made up of representatives from each tumor clinic in the state, has appointed committees to work with the Division of Cancer and Other Chronic Diseases in conducting clinical studies of cancer in certain specific sites. The medical direction is furnished by the committee designated for the particular study, and the statistical advice and procedures by the division.

At the present time, two clinical evaluations are under way, one in which all of the information is obtained from the register, and another where basic information contained in the register is supplemented by further clinical detail obtained from original hospital charts. Since the register was designed to provide statistics of a primarily public health nature, the minutiae of clinical detail must be obtained elsewhere. The register does, however, furnish the basic ingredients for clinical studies, but it alone does not give the final answer.

The method adopted for a study in which all the information comes from the register is as follows:

The medical committee of the Association of Tumor Clinics confers with the chief and the statistician of the cancer division and the particular site to be studied, colon and rectum in this instance, is selected. The committee states its desires in regard to the specific problems to be investigated and details are worked out regarding the statistical tables best suited to answer the questions related to them. Under the direction of the statistician the necessary card-sorting and other statistical procedures are completed by the clerical force. The preliminary tables are then evaluated by the committee and the statistician to determine what further steps may be necessary to complete the analysis. It may be found advisable to eliminate some of the tables that have been prepared because they lack significance, and to add others that have been indicated as necessary by this first evaluation.

The most important information obtainable from this kind of investigation is the length of survival time following diagnosis. It is also possible to determine operative mortality rates by years, thus indicating improvement or the lack of it in the techniques of treatment, and to determine whether one particular treatment is followed by a longer survival time than others, as well as many other findings.

When all the data have been compiled, analyzed and a discussion written, edited, and rewritten, they are published as a joint effort of the committee and the division. While the data for such a study are obtained from reports routinely submitted to the register, the committee of the Association of Connecticut Tumor Clinics performs a necessary and vitally important function by supplying clinical knowledge and advice, and in contacting other members of the medical profession to insure more accurate reporting in the future.

As an example of another form of clinical study, an investigation of carcinoma of the endometrium is being conducted, in which the register is used as a means of selecting the cases to be examined.

A pilot study of cancer of the endometrium is being completed in our largest hospital, the objective being to show the results to the staff members of other institutions, hoping to interest them in making similar investigations in their own institutions, thus obtaining data for a statewide investigation.

As in the previous case, the committee meets with the staff of the division and develops a program of procedure. At later meetings with the statistician, a questionnaire form is devised, which is suited to the eighty columns on IBM punch-cards, and serves as an abstract of all the pertinent information the committee wishes to get from the original hospital chart. As finally developed, the form obtains among other information the following: age, sex, date of diagnosis, items giving indications of operability, stage of disease, microscopic diagnosis, radium and x-ray therapy in detail, surgery in detail, complications of surgery and radiation in detail, and the status of the patients on each anniversary of the date of diagnosis. When these forms have been completed, they are turned over to the division for coding, the preparation of punched cards and analysis.

The investigations outlined above result not only in information concerning the specific sorts of cancer involved, they also produce important by-products. They stimulate the interest of the medical profession in evaluating the results of their own work, they bring about improvement in reporting cancer cases to the register, and they promote discussion and the exchange of ideas. Also they have a definite educational value to all the medical profession.

The follow-up system conducted as a fundamental function of the register is of more importance to the individual with cancer than any other part of the program.

All patients are followed periodically, be they ward or private. This procedure is carried out, however, without invading the sanctity of the relationship between doctor and patient. The local tumor clinic follows each case at varying intervals, depending upon the individual need, and notes the status of the patient on a form provided by the State Department of Health, which is kept in the local clinic. Information concerning private cases is obtained from the attending physician, unless he expresses a desire to have the clinic secretary obtain the data directly. Service cases are contacted directly by the secretary, who calls them in for periodical check-up examinations.

On the anniversary date of the last report to the central register, a request for follow-up information on the individuals concerned is sent from the division to each clinic. A standard form is used, emanating from the division with the name of the patient, the diagnosis and other identifying data already filled in. The clinic secretary completes the form, noting any change in diagnosis and indicating the present status of the patient.

It has been found that this system stimulates adequate follow-up at the local level. At the present time less than 5 per cent are lost to follow-up.

The importance of adequate follow-up cannot be overrated, for it is only by such means that the early detection of recurrences is possible. Whether the follow-up be conducted by a state agency, a local hospital or clinic, or is done on an individual basis by the attending physician may not matter, but done it must be if adequate treatment is the goal.

A collection of cancer morbidity records covering a whole community can be used as a clearing house, where hospitals can get detailed information regarding previous diagnosis and treatment in other institutions. Such knowledge, promptly delivered, is of especial value in cases that have had previous radiation treatment.

Statistics regarding the incidence, prevalence and survival of cancer cases are of value in planning lay educational programs. They indicate the areas where major efforts should be made, and can be used to indicate progress, or the lack of it.

Morbidity records contain information that may be used to advantage in estimating the costs of control programs. Legislative bodies are much more likely to look with favor upon budget requests that are based upon facts than on those that are predicated upon ideas and desires alone.

In summation, it may be said that cancer morbidity records will, when prorperly analyzed, show the need for and progress of a cancer control program, give to the medical profession information that will enable them to improve the end results of treatment, bring added benefits to those individuals afflicted with cancer, and assist the community in developing the most effective control program possible with the money available.

The Diagnosis of Cancer in Childhood

By Harold W. Dargeon, M.D.
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IT IS WELL known that there are many obstacles impeding progress in the control of the tumors of childhood. A most formidable barrier is our limited knowledge of their etiology, their natural history, their therapy—factors which are of concern to the investigator, the biologist, the pathologist, surgeon and radiologist. Until significant progress has been made in many fields of medicine optimum control cannot be expected.

Meanwhile perceptible improvement is continuing, if the expanding list of survivors of juvenile cancers may be used as a guide. The once rather hopeless approach of the profession to this problem is being altered by the evidence that children suffering from many types of cancers including such serious varieties as medulloblastomas,[1,2] neuroblastomas,[3,4,5] and lymphosarcomas[6] are surviving without evidence of disease five and more years following treatment.

However critically one may appraise results as to the value of the particular therapy utilized, it is obvious that the disease in some of these children was attacked before its progress had become irreversible. Briefly, the diagnosis had been made "in time."

The importance of diagnosis in juvenile cancer control is of great magnitude. Initially it is the problem solely of the practitioner but in any survey of children's tumors it will be evident that there are almost no specialties consistently excluded from the responsibility of making the diagnosis whether the field be surgery, dermatology, psychiatry or any other in which children may be involved.

The detection of a tumor in a child may be comparatively simple, extremely complicated or at times impossible even when neoplastic disease seems to be the most probable diagnosis. The methods to be followed in reaching a diagnosis include those used in all pediatric diagnoses, namely the history and physical examination, roentgenography and laboratory studies. In addition, histologic examinations not only aid but in most cases establish the identity of the pathologic process. The combined efforts of clinician, roentgenologist, and pathologist are therefore almost constantly required. The reasons for this need of collaboration are well understod: (1) clinically, neoplasms may mimic many children's diseases, (2) roentgenographically tumors must be differentiated from a multitude of non-neoplastic as well as neoplastic conditions, (3) histologically the similarity between tumors of different histogenesis, certain inflammatory processes, and granulomas of unknown etiology, often provides difficult diagnostic problems to the pathologist.

The clinician frequently finds in the history, physical examination and clinical course of the patient some of the following features which may be of considerable differential diagnostic aid.

1. The symptoms may or may not be acute. If they are subacute or chronic they tend to be progressive. If recurrent the relapses may occur with greater frequency and often with increasing severity.

2. The clinical course deviates from that of an illness initially suspected; for example, the neoplastic swelling of the leg does not disappear as so many contusions do, the orbital ecchymoses from skull tumors may increase in size instead of regressing like the usual "black eye"; the vomiting produced by a posterior fossa tumor may occur at odd times of the day—long before breakfast perhaps, instead of being related to dietary indiscretions.

It is quite true that in addition to neoplasms the possibilities of many other uncommon diseases of children should be explored in any unusual clinical syndrome, but the present delay in diagnosis of cancers in children indicates that significant improvement in this aspect of control is still required (Fig. 1). Briefly, if an atypical clinical syndrome is present the possibility of neoplasm must always be considered.

The need for full clinical data by the roentgenologist, and pathologist is constant. To the roentgenologist a history of trauma, possible metabolic disorder or infection may afford considerable significant information in the interpretation of a roentgenogram of bone. The age of the patient and the physical findings are of importance to the pathologist in the appraisal of the malignancy of certain tumors—melanoma for example. The

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DURATION OF SYMPTOMS PRIOR TO MEDICAL ATTENTION

	WILMS'	NEUROBL.	RETINO-BLAST.	EWING'S	OSTEO. SA.	HODGKIN'S + LSA	LEUKEMIA	RABDO-MYOSA.	ALL OTHERS	TOTAL
UNDER 2 WEEKS	18	18	27	16	13	26	79	12	52	261
2 WEEKS TO 1 MONTH	3	13	3	5	13	3	11	1	19	71
1 TO 3 MONTHS	–	7	1	9	15	2	12	3	16	65
3 TO 5 MONTHS	1	1	1	3	1	–	4	–	5	16
6 TO 11 MONTHS	2	1	4	6	2	3	–	–	4	22
12 TO 23 MONTHS	–	–	2	–	–	–	–	–	4	6
24 TO 35 MONTHS	–	1	–	–	–	–	–	–	2	3
3 YEARS AND OVER	–	2	–	–	–	–	–	–	4	6
TOTAL CASES	24	43	38	39	44	34	106	16	106	450

Children's Tumor Registry
Memorial Hospital
1929–1949

Fig. 1. Duration of symptoms prior to medical attention in 450 cases of childhood cancer.

hemogram is always necessary to aid in the differential diagnosis of lymphosarcoma and leukemia.

A consideration of the chief anatomic sites and systems in which children's tumors occur will indicate specific instances of the varying importance of the different diagnostic measures and the interdependence of clinician, roentgenologist, and pathologist. These are (Fig. 2) intracranial, cutaneous and soft somatic, bone, eye and orbit, lymphoid and hematopoietic, retroperitoneal.

Intracranial tumors.

1. Intracranial hypertension symptoms: headaches, vomiting, papilledema, expanding skull.
2. Cerebellar symptoms: ataxias, muscle weakness, nystagmus.
3. Cortical symptoms: psychic changes, motor and sensory alterations.
4. Hypophyseal symptoms: somatic abnormalities, sexual precocity, diabetes insipidus, visual field impairment and other occular changes.

Roentgenograms are of great value in some instances, but not in all cases.

Cutaneous and Soft Somatic Tumors. These are manifested by swellings, or tumefactions of skin, mucous membranes, and subcutaneous sites. Some, such as hemangiomas, may be readily diagnosed if a cutaneous component is present. If only a subcutaneous mass is noted the diagnosis must await the histologic examination.

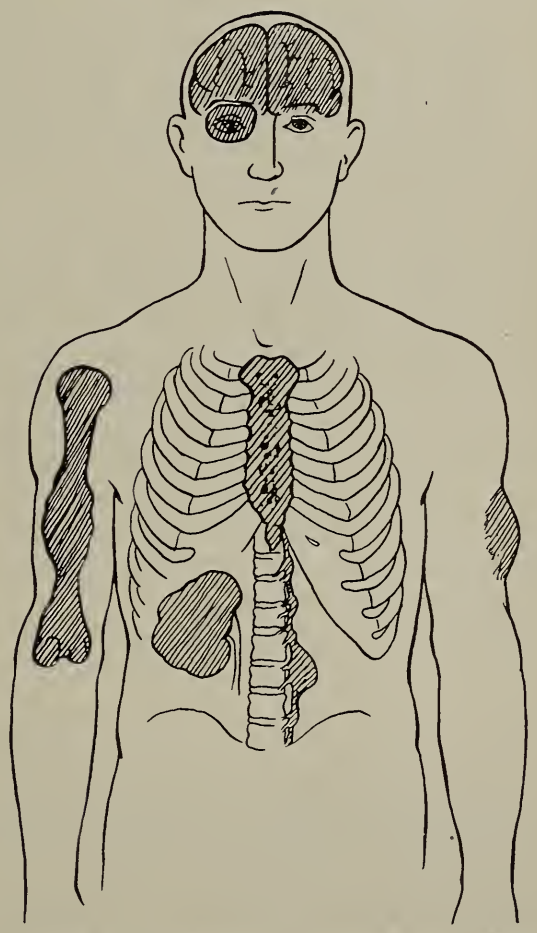


Fig. 2. The most common sites of neoplasms in childhood:

1. Intracranial tumors
2. Cutaneous and soft somatic tumors
3. Bone tumors
4. Eye and orbital tumors
5. Lymphoid and Hematopoietic tumors
6. Retroperitoneal tumors.

Bone Tumors. Roentgenograms are of major importance here. However, the history, physical examination, serology, hemogram and often the histology must be known for a differentiation of tumor from a multitude of other conditions: tuberculosis, syphilis, scurvy, subperiostial hemorrhage, osteomyelitis and reticuloendotheliosis, to mention only a few.

Eye and Orbital Tumors. The soft part extraocular tumors require histologic identification. The most common intraocular tumor is the retinoblastoma which is manifested by diminution in vision, change in the color of the pupillary reflex from black to grey, white, green, occasionally red, and the presence, upon fundiscopic examination, of a tumor arising from the retina.

Lymphoid and Hematopoietic Tumors. The presence—not invariably—of tumors or tumefactions in many sites: the skin, the lymph nodes, the nasopharynx, mediastinum, abdominal cavity and gastrointestinal tract; splenomegaly, hepatomegaly, purpura. Roentgenograms that show the mass, hemograms and marrow studies are likewise required for differential diagnosis.

Retroperitoneal Tumors. A tumor may or may not be detectable by physical examination. Roentgenograms will usually show the mass and intravenous urograms add further diagnostic assistance. Biopsy may be necessary before a decision regarding therapy can be reached, but usually surgical extirpation is so obviously indicated that biopsy is not required. The metastases of certain retroperitoneal tumors, notably neuroblastoma, may become clinically evident before there are any symptoms of the primary tumor.

Tumors may occur in many other sites—the larynx, mediastinum, ovary, spinal cord, or bladder, for example. Irrespective of the nature or location of the tumor the clinician always occupies a most conspicuous position in the establishment of the diagnosis. Knowing the possible chances of error by even the most experienced physician the constant reliance upon any single method—clinical, roentgenographic or histologic—is an unwise diagnostic policy.

Finally, although a prompt and aggressive approach is necessary in many of these situations, it should be emphasized that a very conservative course is demanded by others.

1. The tumefactions of the newborn, so many of which result from birth traumas, rarely offer diagnostic problems.
2. The mammary hypertrophies in the prepubertal male or female almost never should be biopsied or excised.
3. The so-called "therapeutic trial" of radiotherapy in abnormalities of bone which roentgenographically may suggest a tumor is an unsound practice.
4. Radical surgery, radiotherapy or chemotherapy should not be initiated for any condition which has not been positively diagnosed as a tumor, or in which complete studies do not quite conclusively indicate the presence of a neoplastic disease.

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The commonest symptom of cancer of the body or tail of the pancreas is upper abdominal pain, and often it is aggravated by sitting up. Unexplained peripheral venous thrombosis is sometimes an early clue.

* * *

Melanoma is three times as common in white patients as in Negroes.

* * *

Excluding the eyes and skin, the anorectum is the most frequent site of melanoma.

* * *

On palpation of the rectum, carcinoma feels solid and hard. Sarcoma is rather soft and rubbery like fixed brain tissue. Melanoma is firm but not hard.

The principal factors accountable for failure in the surgical treatment of gastric carcinoma are delay in treatment and inadequate operation. The solution of the problem depends to some extent on education of the public and to a greater extent on education of the medical profession as to the facts concerning cancer of the stomach.

* * *

The relatively low operability of gastric cancer is due almost entirely to delay in diagnosis. The delay in diagnosis is not likely to be shortened until all physicians become cancer conscious and aware of the facts concerning gastric cancer.

Problems in Skin Cancer

By James R. Driver, M.D.
Cleveland, Ohio

THE POSSIBILITY of cure in skin cancer is greater than in any other form of malignancy due to the visibility and accessibility of lesions of the skin. The majority are on exposed parts of the body and if the lesion is recognized early and adequately treated, the cure rate should approximate 100 per cent. However, a large number are undiagnosed because the physician may consider an early lesion too trivial to be concerned about or adopt a policy of watchful waiting, applying some ineffective medicament, reassuring the patient that he has nothing to worry about. As a result, only too often the condition becomes a serious one before its true nature is recognized.

The diagnostic problems in skin cancer are not difficult to solve if these six basic principles are observed:

1. Always consider the possibility of malignancy in cutaneous growths in persons over forty years of age until the true nature of the lesion has been proven. This means that many will require a biopsy and a microscopic examination.
2. Apply no treatment until a correct diagnosis has been made.
3. Be familiar with precursor lesions from which the majority of skin cancers develop.
4. Remember that while skin cancer is essentially a disease of late adult life, it can, and does occur at any age.
5. Slow growth is not a sign of benignancy.
6. Some cancers develop from apparently normal skin without a precursor lesion.

Etiology

The occurence of cancer of the skin depends upon an interaction of genetic and environmental factors and is a disease primarily of mature years, usually after the fifth decade of life. Ultra-violet and solar radiation, when excessively received—especially in fair-skinned people—is probably the commonest single cause of cancer on exposed areas of the skin. Ionizing radiations from x-rays, beta and gamma rays from radium, radium evanations, and radio-isotopes are carcinogenic if too much is received by the skin. The polycyclic hydrocarbons from tars, pitch, carbons, and petroleum containing the phenanthrene ring not infrequently result in cancer of the exposed skin in industrial workers.

Any form of chronic irritation may be the precursor factor. Thus, we see malignancy developing in old scars; particularly, burns and in old lupus scars, chronic varicose ulcers, in leukoplakia of the lips and mouth seen in late syphilis, and in tobacco users. Leukoplakia and kraurosis of the genitalia are important precancerous conditions. Also, dangerous melanocarcinoma develops sometimes in certain types of pigmented nevi.

Precancerous Lesions

Since most malignant lesions of the skin are preceded by a precancerous change, their recognition and proper removal will almost invariably preclude the development of cancer. Therefore, a short discussion of the most important precancerous lesions is in order:

1. Senile Keratoses.—These are circumscribed flat, dry, scaley, brownish or grayish, horny lesions from a few millimeters to two or more centimeters in diameter. The face, hands, and arms are the usual areas involved. Blonds with red hair and blue eyes are the most susceptible. Farmers, sailors, carpenters, policemen, and mail carriers are frequently afflicted due to their constant exposure to the aging influence of sun and wind.

They are seen chiefly in older persons and are easily removed with excellent cosmetic results by blistering them off with the electrocautery or by electro-dessication.

2. Tar or Carbon Keratoses.—These are seen on the exposed skin of workers in the coal, carbon, and petroleum industries and result from the carcinogenic action of certain polycyclic hydrocarbons. They are indistinguishable from senile keratoses but are more likely to result in subsequent cutaneous cancer.

Treatment is the same as for senile keratoses. Irradiation is not an approved method of treatment. Malignancy developing in a senile or tar keratosis is frequently of the dangerous squamous cell type.

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3. Arsenical Keratoses.—These are closely set, discrete, hard, raised, horny, wartlike lesions found chiefly on the palms, soles, genitalia, groins, axillae, and ears. Almost invariably there is a history of the ingestion, years previously, of trivalent arsenic —commonly, "Fowler's solution." The presence of a more-or-less generalized brownish, macular, or freckle-like pigmentation of the skin is helpful in differentiating this condition from common warts. The resulting malignancy is always of the dangerous squamous cell variety.

A superficial basal cell type of malignancy sometimes develops in lesions of psoriasis and seborrheic dermatitis in individuals previously treated with trivalent arsenic.

4. Seborrheic Keratoses.—These lesions, sometimes resembling a senile keratosis, may occur at any age but most frequently appear after middle life. Persons with a seborrheic, oily skin are the most susceptible. They occur chiefly on the scalp, face, neck, and upper portions of the chest and back. They vary from a tiny size to a centimeter or more in diameter and are usually multiple. Some patients have as many as a hundred or so lesions. They are asymptomatic, raised, greasy, brownish or dirty brownish gray, or even black in color. A virus has been demonstrated as an etiologic factor. They resemble verrucae in many instances and are autoinoculable.

Seborrheic keratoses infrequently degenerate into carcinoma but when they do, it is of the basal cell variety. Treatment is the same as for senile keratoses. The differential diagnosis from senile keratoses is usually not difficult but in the deeply pigmented variety, the possibility of a malignant melanoma must sometimes be considered.

5. Radiodermatitis.—Changes in the skin resulting from overexposure to ionizing radiations are seen in physicians, dentists, and technicians employing x-rays and radium in diagnostic and treatment procedures. Patients too are not infrequently affected by the injudicious use of these agents. The resulting damage is progressive and irreversible, causing a dry, wrinkled, atrophic change with pigmentation and telangiectasis. In the late, chronic cases, keratoses develop from which squamous cell carcinoma may arise.

Irradiation cancer should be treated by surgical excision followed by plastic repair if necessary. The same procedure is also advisable in areas of radiodermatitis as a prophylactic procedure. The keratoses can be removed by electrocautery or by electrodessication.

6. Kraurosis Vulvae.—This is an atrophic dermatosis resulting in the disappearance of the minor labia and is frequently associated with leukoplakia. It is definitely a precancerous condition, particularly when it becomes thickened or verrucous. A biopsy may be necessary in order to differentiate it from lichen sclerosis et atrophicus of the vulva which closely resembles kraurosis vulvae. Kraurosis vulvae is rarely seen prior to the menopause. Vulvectomy is the treatment of choice in all advanced cases.

Kraurosis of the penis, also known as "balanitis xerotica obliterans," presents the appearance of leukoplakic plaques and atrophy in which cancer frequently develops. The disease occurs only in uncircumcised males.

7. Leukoplakia.—These lesions occur on the mucous surfaces of the mouth, the vermilion border of the lips, and on the genitalia. In the mouth they usually develop as the result of some form of chronic irritation. The type seen in late syphilis is most likely to result in malignant change. Twenty per cent of all cases of cancer of the tongue in males is secondary to syphilitic leukoplakia. Other causes of leukoplakia are irritation from carious, jagged teeth, chronic gingivitis, electrogalvanic currents from dissimilar metals, friction from ill-fitting dentures, vitamin-B deficiency, hot drinks, and highly seasoned foods. Leukoplakia caused by smoking or chewing tobacco and in snuff-dippers is quite common and is a definite indication for stopping the habit. With the exception of syphilitic leukoplakia, the lesions disappear or are greatly improved by removal of the cause.

Early lesions are snow-white or a bluish-white color in appearance and are sharply defined or fading at the border. Later, some become thickened, plaque-like, or verrucous, and when this occurs, malignancy may be imminent. Removal by blistering them off with the electrocautery or by electrodessication and curettage usually suffices but recurrences are common. If malignancy is suspected, a biopsy should be performed.

Squamous cell cancer of the mouth predominates in men in the proportion of four to one. It, therefore, becomes the most important mouth

lesion and its early diagnosis and adequate treatment is imperative.

Cancer of the lower lip is frequently preceded by leukoplakia or leukokeratosis and chronic cheilitis from long exposures to the sun, wind, and smoking. It is rarely seen in women but commonly develops in farmers, sailors, fishermen, and other outdoor workers. Untreated cancer of the lip is a fatal disease, yet if it is diagnosed early and adequately treated, the mortality should be practically zero.

8. Moles.—Moles develop before or shortly after birth in the great majority of instances. Scarcely any individual is free of one or more types. They may be of various sizes and are flat, raised, pedunculated, fibrous, pigmented, non-pigmented, hairy, or non-hairy.

From the standpoint of a possible malignant change, only pigmented nevi assume considerable importance. Although the number that become cancerous is small, still the malignant melanoma developing in a pigmented mole is the most serious type of cancer arising in the skin. This is true due to its early tendency to metastasize not only by way of the lymph channels, but also frequently by way of the blood stream. The first evidence of the disease may be the appearance of a metastatic lesion in any of the internal organs and then cure is not possible.

Pigmented moles, without hair growth, of the flat or very slightly raised variety presenting varying shades of blue, slate, brown, black, or combinations of these colors, are the most likely to cause trouble. They are known as "junction nevi" and are seen on any part of the body. If situated on areas subject to repeated irritation such as the palms, digits, soles, about the waist, breasts, neck, face, or scalp, they should be completely excised surgically before any evidence of change has occurred. If possible, this should be done before the age of puberty for malignant melanoma is uncommon in childhood. All such lesions after removal should be histologically examined and if there is evidence of malignant melanoma, further deep and wide excision should be performed.

Evidence of irritability, increase in size, or increase in pigmentation indicates a change from a benign to a malignant status in a junction nevus. In an obviously well developed malignancy of this type, radical surgery with dissection of the adjacent lymph nodes, and at times the more radical procedures advocated by Pack, should be performed. A cure rate of 30 per cent or more is possible if a realistic surgical approach is taken in the treatment of malignant melanoma. Irradiation of any kind is contraindicated.

Treatment

The adequate removal of precancerous lesions almost invariably precludes the development of cancer. If malignancy has developed, lesions from one to two centimeters in diameter can be equally well treated by irradiation, surgical excision, or electrosurgical methods. The method used depends upon the location of the lesion, the methods available, and particularly upon the experience of the physician in the use of some particular method. Irradiation is frequently chosen because of the better cosmetic result and in cases where a surgical procedure would result in an impairment of function.

In large lesions which are frequently ulcerated or those showing recurrences following inadequate previous attempts at cure, and/or those that are infiltrated or complicated by metastatic involvement, the treatment problem becomes more complicated and requires individual evaluation. It is in these cases that judgment acquired by much experience is invaluable. Here the use of radical surgery, heavily filtered x-ray, or radium treatment is indicated and it is in this group that failures too often occur.

In selected cases we have found that the use of interstitial irradiation with low intensity, heavily filtered, radium needles over a period of seven to nine days is frequently successful and cures have resulted in what occasionally appeared to be almost hopeless situations. This is true particularly in instances of recurrence resulting from inadequate previous treatment.

In other cases, a realistic surgical approach—or a combination of surgery and irradiation—is necessary, particularly if metastasis has developed.

In making decisions as to what therapy should be employed, the importance of a tumor clinic with the opinion of the surgeon, the plastic surgeon, the radiologist, the pathologist, and the dermatologist —who by training is especially well qualified in the diagnosis of precancerous and malignant lesions of the skin—frequently becomes desirable.

Leukoplakia of Oral Mucous Membrane, Tongue and Anal Region

Nine-Year Ingestion of Vitamin B Complex as a Possible Etiologic Factor

By Robert C. Moehlig, M.D.

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THE POSSIBILITY that a nine year ingestion of Vitamin B Complex (nicotinic acid) in large dosage with its nicotinic acid content may have produced leukoplakia of the oral mucous membrane, the tongue and the anal area is suggested by the following case.

Report of a Case

E. R., a sixty-year-old white man, was first seen on July 13, 1948, for excessive fatigue, insomnia and a chronic cough. His past history revealed that he had a right herniotomy at the age of nineteen. His mother had hypertension and his father died of pulmonary tuberculosis.

On his first office visit July 13, 1948, the physical examination showed that he had a bilateral adenomatous goiter, the right side being the larger. A roentgenogram of the chest showed no abnormalities of the lungs or heart. There was no substernal extension of the goiter. Operation was recommended and performed on October 4, 1948, a bilateral intraglandular thyroidectomy was performed. The pathological report was "thyroid adenomata with hemorrhage, extensive fibrosis and cystic regeneration." His son subsequently had a thyroidectomy which was reported as a "nodular colloid goiter." The patient's wife had also undergone a thyroidectomy in 1949 for "chronic thyroiditis."

The patient did well following the thyroidectomy and he was seen on February 22, 1952, with the complaint of white spots on the tongue, inside of the mouth and anal region since January, 1951. In December, 1951, he had a hemorrhoidectomy and the removal of a leukoplakic area from the anal region at the Highland Park General Hospital. The pathological report was "benign keratotic epithelioma of the skin."

On his February 22, 1952, visit the only abnormalities noted were the leukoplakic areas of the tongue and of the buccal mucous membrane of the mouth. The whole buccal area was involved in the leukoplakic process. The anal area showed areas of leukoplakia, measuring 4 by 4 cms. The Kahn test on two occasions was negative. The hemoglobin, erythrocyte and white cell count were normal as was the differential count. The blood pressure was 120/90 mm. Hg. He was told to stop smoking, given oral cortisone, 100 mg. daily, for four days, then 25 mg. twice a day until April 8, a period of five weeks with but little improvement in the lesions despite this form of therapy and no smoking. On April 8, he was started on 20 units of ACTH (Acthar Gel) every three days for five doses with no improvement.

When seen on April 21, inquiry was made as to what other medication he had been taking and this revealed the interesting fact that for a period of seven years he had taken daily three to four capsules of a Vitamin B Complex preparation, containing: "Vitamin B_1 (Thiamin hydrochloride), 10 mg.; Vitamin B_2 (Riboflavin), 10 mg.; Nicotinamide (Niacinamide), 10 mg.; Pantothenic Acid (as Sodium Salt), 3 mg.; with other components of the Vitamin B Complex derived from liver."

This preparation was a product of one of the leading reliable pharmaceutical houses. This daily routine ingestion of four to five capsules was continued for a period of seven years and then the patient changed to a liquid preparation made by the same firm. This liquid Vitamin B Complex consisted of the following: "Each fluid ounce contains Vitamin B_1 (Thiamin Hydrochloride), 12 mg.; Vitamin B_2 (G) (Riboflavin), 24 mg.; Vitamin B_6 (Pyridoxine Hydrochloride), 6 mg.; Nicotinamide (Niacinamide), 120 mg.; Pantothenic Acid (as the sodium salt), 12 mg., with other factors extracted from yeast and rice bran."

The dosage of this preparation was two to four tablespoonsfuls daily for a period of approximately two years. He had been induced to take the vitamins by the constant admonition over the radio that the American diet was deficient in Vitamins—particularly Vitamin B—and needed supplementing. He did the latter with a vengeance and so took the above enumerated amounts for a total of nine years.

On May 12, he was told to stop the Vitamin B Complex preparation and by June 16, the lesions were much improved. The tongue, the buccal mucous membrane and the anal region were clearing up. The itching of the rectum had stopped. There were excrescences of papillomatous tissue which practically disappeared after stopping the Vitamin. Furthermore the itching stopped completely, shortly after discontinuing the Vitamin.

Comment

Smoking has been incriminated in the etiology of leukoplakia and specifically the nicotinic acid and tar. Irritants such as spices and alcohol have been mentioned as causing the condition. If nicotinic acid is a factor, then by conservative estimate the patient ingested approximately 156,000 mg. of nicotinic acid in nine years. It seems likely that his intake was greater than this but even with conservative estimates this is a large

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amount. The fact that the lesions have almost disappeared and the itching of the anal region has stopped following discontinuance of the Vitamin suggests that the latter may have been the offending factor.

Suggestive is the fact that pellagra has both buccal lesions and lesions of the tongue and anal region. It has been indicated that nicotinic acid is curative for black tongue of dogs and for pellagra of humans.[2] The fact that black tongue of dogs and the pellagra tongue of humans as well as other symptoms of pellagra are cured by nicotinic acid suggests that nicotinic acid has an effect on the epithelium of tongue and other epithelial structures. Therefore its toxic manifestions may be shown in these tissues.

From a speculative standpoint the fact that this patient had a thyroidectomy may have been a factor in the selective action of the nicotinic acid for the epithelial tissues, since the thyroid has a selective action on epithelial or ectodermal structures such as oral mucous membrane, nose, epithelium of rectum, skin, nervous system, pituitary gland and others.

There is the possibility that some other factor or factors than the Vitamin B Complex caused the leukoplakia but the history of a nine year ingestion of this product plus the fact that the lesions were clearing up when the product was stopped suggests that it was the etiological factor. It must be said that millions of Vitamin B Complex doses have been taken without any reports that I could find of leukoplakia associated with Vitamin B Complex ingestion. However the amount taken by the patient herein reported was over a long period of time and in excessive amount.

Summary

A case is reported of a sixty-year-old man with leukoplakia of the tongue, buccal mucous membrane and anal area. This patient had taken a Vitamin B Complex for a period of nine years. The lesions had been present for approximately one year. Removal of a leukoplakic area from near the rectum was reported microscopically as a "benign keratotic epithelioma of the skin." It was suggested that the nicotinic acid in the Vitamin B Complex may have been responsible for the leukoplakia. Improvement followed discontinuance of the vitamin.

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MORE STUDENTS NEEDED

During the past three years there has been a decided drop in the number of applicants to our medical schools. This is evident from the following chart, prepared by John M. Stalnaker, Director of Studies, Association of American Medical Colleges.

COMPARISON OF NUMBER OF APPLICANTS FOR PAST FIVE YEARS

Freshman Year	*Number of Applications*	*Number of Individuals*	*Applications per Individual*
1947-48	56,279	18,829	3.0
1948-49	81,662	24,242	3.4
1949-50	88,244	24,434	3.6
1950-51	81,931	22,279	3.7
1951-52	70,678	19,920	3.5
1952-53	56,254	16,760	3.36

The same trend is occurring at the undergraduate level where the number of students taking the medical college admission (aptitude) test has decreased markedly. In 1948-49 almost 27,000 were tested; by 1951-52 the number had fallen to 12,000. This represents a loss of 15,000 candidates in four years.

The reasons behind these changes will afford any group of physicians a stimulating evening of debate. The question involves finances, politics, war, and the future of the profession. Meanwhile, let's recognize the fact that many of our schools will be forced to dig deeper into the barrel to fill their classes; they must sacrifice quality for quantity to meet the current demands for more physicians. Meanwhile the practicing physician can help by encouraging the better students to choose medicine as a profession. The idea that admission to a medical school is difficult or almost impossible is no longer tenable; let's forget this oldtime notion before it rebounds.—Editorial, *Illinois Medical Journal,* December, 1952.

The Management of Pain of Cancer

By John J. Bonica, M.D.
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IT HAS been estimated that in the United States approximately 200,000 people die each year from malignant disease. Many of these people spend their last few months of life suffering from pain. Although cancer may not be painful at its onset, in many instances it eventually gives rise to pain which becomes progressively more severe and finally develops into a boring, relentless, intolerably agonizing suffering that all too soon causes a physiologic as well as psychologic deterioration. These unfortunate patients who suffer from this disorder are soul-stirring sights, in great need of relief that all too frequently does not come. Notwithstanding the hopeless prognosis of such cases, the pain problem deserves an intelligent appraisal and perhaps equally vital, a systematic plan for relief which will conserve the patients' physical, mental, and moral resources and their social usefulness as long as possible. Such a plan requires study and consideration of each individual patient and the proper application of the method best suited in managing his pain. The deplorable attitude of defeatism and apathetic therapeutic inactivity found in some quarters must be abandoned and replaced by courageous aggressiveness tempered by sane judgment.

Mechanisms and Types of Pain

The etiologic factors responsible for the pain include: (1) compression of nerve roots, nerve trunks or plexus by the tumor or compression by metastatic fractures of bones adjacent to the nerves, resulting in a radiculitis or neuritis which is accompanied by sharp, well-localized, projected pain typical of neuralgia, (2) infiltration of the nerves and blood vessels by tumor cells, resulting in a perivascular and perineural lymphangitis and consequent irritation of the sensory nerve endings, producing a diffuse, burning pain—the so-called sympathetic pain, (3) obstruction of a viscus, particularly the gastrointestinal and genitourinary tract, with consequent production of true visceral pain which is characteristically dull, diffuse, and poorly localized, (4) occlusion of blood vessels either partial or complete, by an adjacent tumor producing venous engorgement, or arterial ischemia or both and resulting in pain, (5) infiltration, tumefaction, and swelling in tissue invested snugly by fascia, periosteum, or other pain-sensitive structures, (6) necrosis, infection, and inflammation of pain-sensitive structures produced by contiguous tumors causing pain which is sometimes excruciating.

Methods Used for Managing Pain

At the present time the management of intractable pain of malignancy revolves about two main methods of approach: (1) elimination of the cause by decreasing the size or completely eliminating the tumor, (2) control of pain without affecting the neoplasm. In the former category can be included radiation therapy, the administration of sex hormones and palliative operations, while the latter category is composed of analgesic drugs, neurosurgical operations, and analgesic blocking. While it is not entirely within the province of this paper to discuss methods of treatment other than nerve blocking, those most commonly used are mentioned briefly for orientation and because they have such an inextricable bearing on the subject. Before doing so, a few words should be said about the value and importance of psychologic support.

Psychologic Support

In no other disease is the patient's need for moral encouragement so great. This point is particularly emphasized because too often the specialist who is consulted to manage patients with cancer pain thinks in terms of anatomy and physiology—the pure physical facet of the pain—and focuses his attention on the interruption of pain perception without giving sufficient thought to the mental aspect of the problem. The practitioner should bring the patient a sympathetic understanding, cheerfulness, reassurance, and encouragement, yet avoid false hopes and over-optimism. He should do all he can to instill into the patient confidence and a sense of security based upon the conviction that all will be done to relieve his suf-

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fering and that his problem is not meaningful to him alone.

Eradication of Tumor

The value of *palliative operations, radiation therapy,* and the *administration of sex hormones* and other so-called specific agents to reduce the size of the tumor or to completely eliminate it is well recognized by oncologists.[1,6,14,28,35] The relief of pain accompanying these procedures is often dramatic, but unfortunately it is rarely permanent. It is, nevertheless, a gain in both time and courage and, therefore, these procedures should always be tried first in indicated cases. When these procedures are ineffective or not feasible, pain must be relieved by other methods.

Analgesics

The first court of appeal in the management of cancer pain is to administer *narcotic analgesics*[9] and other pain relieving drugs such as *cobra venom,*[21] *intravenous alcohol,*[33] and *non-narcotic analgesics,* particularly acetyl salicylic acid, which when combined with *hypnotics* are valuable in managing the initial mild pain of cancer. The efficacy of narcotic analgesics, particularly opiates, in managing pain of terminal malignancy, is too well known to warrant discussion. When pain becomes severe and persistent and other more radical methods are not available or contraindicated, the proper use of these agents is a great blessing to the patient. Unfortunately their effectiveness, low cost, and ease of administration—very desirable qualities in any drug—are conducive to improper use by the busy practitioner, who may have neither the time nor the interest individually to study and consider each case so that the pharmacologic properties of the various narcotic drugs are fully exploited to the advantage of the patient. The attitude and practice of some physicians to "snow the patient under because the end is inevitable" denotes a lack of understanding of the problem. Because it is very difficult to estimate the length of life in each individual case, such sense of mistaken humanitarianism may be productive of an unnecessarily premature addiction with consequent stupefication, respiratory depression, headache, anorexia, nausea, vomiting, and will bring on a state of cachexia more rapidly. Moreover, because tolerance develops rapidly, the patient may not obtain adequate relief in the latter stages of the disease, when comfort is so essential, even with massive doses, and he may also develop withdrawal symptoms when the amount administered is no longer effective. In view of this and because frequently severe pain is not completely relieved by narcotics, it is unwise to rely on the use of such drugs alone to control cancer pain; rather one should plan the early use of palliative operations, radiation or endocrine therapy, nerve blocks, or neurosurgical operations, if these are available and feasible, before addiction develops.

Neurosurgical Operations

If the patient is in good physical condition, he should be afforded prolonged relief by neurosurgical operation. The efficacy of rhizotomy, sympathectomy, spinothalamic chordotomy in the upper spinal cord or brain stem, and prefrontal lobotomy in relieving intractable pain is beyond dispute.[5,10,11,15,23,25,26,29,31] Unfortunately they impose a significant mental, physical, and financial strain, and are not infrequently accompanied by serious complications and occasionally by failures. It is generally conceded by neurosurgeons that these procedures should be avoided in patients who are in poor physical condition and who have a life expectancy of less than three to six months.

Analgesic Blocking

In such cases, analgesic blocking offers the best solution to the problem.[4,7,18,30,34] Although this method has certain limitations, it has a great deal more to offer than narcotic analgesics. Effective blocks produce adequate relief of pain and enable the sufferer to receive more intensive radiation therapy and other forms of medical treatment which otherwise could not be tolerated. Properly executed blocks do not significantly add to the patient's discomfort; are not accompanied by the depression and addiction inherent to narcotic therapy; and do not impose the risk of major surgical procedures. Most of the nerve block technics are relatively simple to do for the anesthesiologist who has acquired skill in performing them for surgical anesthesia.

The most significant disadvantages in using nerve blocks in the management of pain of malignancy are that sometimes inadequate relief results and occasionally complications occur. Inadequate relief results either from failure of the original injection to interrupt completely all the nervous pathways conducting the pain, or it may be due to spread of the pain beyond the anesthetized region.

The fact that pain of malignancy has a tendency to spread in time and space is well known and accounts for some failures—the block may initially anesthetize the painful region and afford complete relief of pain, but in a few days, weeks, or months the neoplasm may spread beyond the confines of the anesthesia and produce additional pain.

Occasionally chemical interruption may not last sufficiently long to afford the patient relief of pain until death. This may be the result of failure of the block to last as long as anticipated or because the patient has lived longer than expected. Fortunately, since the block can be repeated several times without further taxation of an already overburdened physiologic economy, not all of these disadvantages are as significant as they may seem on superficial thought.

A more important disadvantage is the complications which may occur during or following nerve blocks. Of these, accidental pneumothorax, total spinal anesthesia, chemical neuritis with subsequent neuralgia, muscle weakness, and involvement of rectal and vesical sphincters are the more serious.

Indications.—As already stated, nerve blocks are primarily indicated in patients who, because of their poor physical status, are unsuited for surgery or in those who, for some reason, are unwilling to undergo the more major therapeutic offering. It is also indicated in patients who have such rapidly growing tumors that the life expectancy is considered to be only a few weeks or months. Many clinicians, including the author, believe that in such cases the benefit derived from an operation is not commensurate with the physiologic and psychologic exaction imposed upon the patient by surgery, not to mention the financial burden. This is especially so in view of the fact that the patient can be given adequate relief from pain with nerve blocks. It is of course true that the life expectancy cannot be accurately predicted, but since blocks can always be repeated this is not a valid reason to subject all patients who appear to have only a few months to live to a major operation.

Agents.—Of the many agents that have been employed for nerve blocking to relieve the pain of malignancy, only a few are clinically useful. Acqueous solutions of *local anesthetics* are used for diagnostic-prognostic blocks, and occasionally these temporary blocks are followed by prolonged relief from the pain, which in some instances never returns. *Intravenous procaine,* pontocaine, xylocaine, and nupercaine have been tried in our clinic, but since these have produced only transient, partial relief, they are no longer used for this purpose. *Oil solutions* of local anesthetics are not commonly used because they produce unpredictable results,[4,17] The use of *ammonium compounds* has been advocated by some authors,[13,16] who claim that such drugs as dolamine exert a depressant effect upon the unmyelinated C fibers of somatic nerves which carry pain impulses, thus eliminating pain without interfering with other sensations and motor function. We have found dolamine disappointing, but recently at Lundy's suggestion[20] began to employ six per cent ammonium sulphate, which thus far has produced some encouraging results. We frequently employ this agent before resorting to alcohol. Aqueous solutions of six per cent *phenol* are excellent agents for producing prolonged sympathetic interruption in those patients who manifest sympathetic pain.[22]

For optimal therapeutic results in managing the intractable pain of malignancy with nerve block, *ethyl alcohol,* in spite of its disadvantages, is the most efficacious agent available, because when accurately and properly deposited, it effects a prolonged block which may last for weeks, months, or even years. This is brought about by destruction of nerve fibers by the alcohol, resulting in Wallerian degeneration. Optimal effects are not manifest until several days after the block, which according to Olmstead and Hodgson,[24] and Labat[19] is due to the progressive necrotization of individualized nerve fibers in order of increasing size.

A recent analysis of the cases reported in the literature revealed that of the many patients with cancer pain managed with alcohol nerve blocking, 63 per cent obtained complete relief, 23.5 per cent obtained partial relief, and only 13.5 per cent received no benefits from the blocks. That these results compare favorably with those obtained with neurosurgical procedures is apparent from the following representative data pertaining to pain relieving operations. In a group of 126 patients, 100 of whom had malignant disease, treated by Grant and his associates[11] with chordotomy, 64 per cent experienced complete relief, 22 per cent had partial relief, and the rest either had no relief or died. Scarff[31] reports that of a group of fifty-

eight patients treated with unilateral prefrontal lobotomy, following the operation 66 per cent no longer complained of pain, 20 per cent complained of some pain, but were more comfortable, and 14 per cent showed no improvement.

Techniques.—The selection of the technique to be used depends on the localization and nature of the pain. It is necessary to know the type of neoplasm, its grade of differentiation, and the structures it might invade so that a block which will afford sufficiently widespread analgesia is selected. For purposes of this discussion, four corporeal territories are recognized: (1) the head and neck, (2) the upper extremity, (3) the trunk, and (4) the pelvis and lower extremity. For pain of the face, mouth, tongue, throat, and neck, alcoholic injections of the trigeminal nerve or its branches, the glossopharyngeal and vagus nerves, and/or the upper cervical spinal nerves are usually very effective. Pain below the neck can be controlled for weeks or months with subarachnoid alcohol block, paravertebral block, or injections of peripheral or intercostal nerves.

The subarachnoid injection of alcohol is a technique which merits special mention because when properly executed, it produces a chemical rhizotomy which compares very favorably with surgical section. This procedure, therefore, can be used to afford relief from severe, intractable pain to patients who are unsuited for the more radical neurosurgical procedures. Since Dogliotti[8] first described it, its advantages have been exploited by many clinicians, including Stern,[32] Greenhill,[12] Poppen,[27], Adson,[2] and many others in this country and abroad. I would like to pay tribute to Dr. Harry Saltzstein of this city who was one of the pioneers with this technique.

The technique is based upon the difference in the specific gravity of alcohol and cerebrospinal fluid. Alcohol, having a specific gravity of 0.810, will rise to the highest point above the cerebrospinal fluid, which usually has a specific gravity of 1.006. By placing the patient in such a position that the alcohol when injected into the subarachnoid space "bathes" exactly the nerve roots one wants to influence, destruction of pathways conveying pain and other sensations takes place.[3]

Pain in the Head and Neck

The face, mouth, and throat are frequent sites of neoplasms which not infrequently produce severe pain by expansion and pressure on one or more of the cranial nerves. Extensive lesions may also involve the cervical plexus. The face is involved by tumors which commonly arise from structures about the mouth, nose, and paranasal sinuses. Fortunately these usually spare the eye, and, therefore, the pain may be controlled by injecting the second and third divisions of the trigeminal nerve. However, if for any reason analgesia cannot be produced by injecting the second and/or the third divisions, one should not hesitate to inject the gasserian ganglion, because the patient must obtain relief of pain, even at the price of keratitis.

The pain consequent to carcinoma of the tongue may be controlled with lingual or mandibular nerve block, but if it involves the base of the tongue, tonsils, and throat, the glossopharyngeal nerve must also be injected. In some cases the floor of the mouth and the neck are also involved, requiring, in addition to the above, paravertebral injection of C-2 and C-3. If the tumor involves the lower pharynx and larynx, superior laryngeal nerve block must be effected to relieve the pain. In some cases it is necessary to also block the stellate ganglion. The following cases are illustrative:

Case 1.—L. M., a man, sixty-four years old, entered Pierce County Hospital with a cancer of the lower lip which had been treated with radiation therapy and simple section. When first seen by the author he presented a large, funguating, ulcerative lesion, which was accompanied by severe pain. This was relieved by (1) block of the right mandibular nerve by the lateral route; (2) of the left inferior alveolar nerve by the external route; (3) of both infraorbital nerves; and (4) the second and third cervical nerves, bilaterally.

Case 2.—A. W., a railroad engineer, sixty-nine years old, three months following diagnosis of fibrocarcinoma of the left eye, developed severe pain in the eye and ipsilateral side of the face, particularly the cheek. This became progressively worse and interfered with the patient's comfort in spite of large doses (gr ⅓) of morphine given every three hours. When he was seen by the author four months later, his condition was poor and, therefore, it was decided to attempt alcohol block. A gasserian ganglion block with 1 cc. of alcohol produced complete relief of pain, and the patient stated he was comfortable for the first time in months. During the following three weeks, the dosage of morphine was gradually decreased, and finally the patient was able to get along with codeine and aspirin. Three months after the block, the patient began to experience diffuse, burning pain over the entire ipsilateral side of the face. Examination at this time revealed that he still had anesthesia in the distribution of the trigeminal nerve. A

stellate ganglion block was done with 0.2 per cent pontocaine with almost complete relief of pain. This was repeated twice before absolute alcohol was injected. Following the second injection, the patient required empirin compound with ½ gr. of codeine three times a day to be comfortable. He died five and one-half months later.

Case 3.—P. S., a white man, fifty-four years old, entered the pain clinic for management of severe, intractable pain consequent to extensive carcinoma of the neck. Subarachnoid alcohol block with 0.2 cc. of alcohol injected through each of three needles placed in the third, fourth, and fifth interspaces afforded complete relief of neck pain, but did not relieve pain in the arm. This was completely relieved by a subsequent block with needles placed in the third, fifth, and seventh cervical interspaces. A complication, slight paresis of extremity followed.

Pain in the Upper Extremity

Cancer frequently produces pain in the upper extremities, which in the advanced stages is a continuous severe, relentless discomfort which prevents the patient from moving the limbs. This pain may be due to (1) metastatic or primary tumors of one or more of the lower cervical and upper thoracic vertebrae with consequent pressure on nerve elements, (2) pressure on the brachial plexus in the supraclavicular fossa (producing so-called Pancoast syndrome) or axilla, (3) invasion of the nerve elements and large vessels by tumor cells producing a perineural and perivascular lymphangitis, and (4) pressure on one or more of the peripheral nerves or other pain sensitive structures by neoplastic lesions of the bones and soft tissues of the limb, such as osteosarcoma.

Pain due to lesions of the first two categories may be controlled by subarachnoid or paravertebral nerve blocks. Since these procedures, like rhizotomy and peripheral nerve section, result in deafferentation and occasionally weakness of the extremity, they are not satisfactory because they produce an essentially useless limb. Nonetheless, if the pain is so severe as to prevent movement, relief is necessary. Subarachnoid block has the advantages of producing chemical section proximal to the site of the lesion and not being accompanied by chemical neuritis, which sometimes follows paravertebral block with alcohol. Brachial plexus block may be employed if the aforementioned techniques cannot be used or are ineffective, but since this procedure is attended by partial or complete motor paralysis, it should be used as a last resort. The diffuse, poorly localized sympathetic pain due to lesions of the third category is very difficult to control, but may be amenable to sympathetic blocks alone or in combination with subarachnoid or paravertebral injections. Pain due to lesions in the extremity are treated by peripheral nerve block so as to preserve as much function as possible.

Case 4.—C. S., a white woman, fifty-eight years old, had a radical mastectomy in 1948. In June of 1951 she experienced sudden onset of pain in both shoulders and arms, more severe on the right. X-ray revealed dissolution of the fifth cervical vertebra with compression of the fourth against the sixth. The pain was excruciating, necessitating large doses of opiates. Subarachnoid alcohol block was done with 0.3 cc. of alcohol injected into the third and sixth interspaces. This resulted in only partial relief of pain. The block was repeated twice before complete relief was effected. This lasted until her death eleven weeks later.

Case 5.—B. M., a white woman, forty-seven years old, began to have swelling of her left arm ten months after a left radical mastectomy performed in June, 1950. The swelling was accompanied by diffuse, burning pain which became progressively worse. In August, 1950, a series of stellate ganglion blocks was given to control the pain and reduce the edema, but these were unsuccessful. On August 21, a subarachnoid alcohol block was done with 0.5 cc. of alcohol being injected through needles placed at C-4 and C-7 interspaces. This produced only partial relief of pain so that five days later a subarachnoid alcohol block was repeated with 0.4 cc. injected through needles placed at C-5, 6, 7, 8, T-2, 3, and 4 interspaces. This produced complete analgesia to pinprick of the entire extremity and subjectively relieved almost all of the pain.

Pain in the Trunk

Intractable pain in the trunk may be due to (1) tumors of the spinal cord and its meninges, (2) cancer of the vertebral column, (3) cancer of the somatic structures, including tumors of the ribs, sternum, pleura, peritoneum, mediastinum, and the other soft tissues of the parieties, and (4) cancer of the thoracic and abdominal viscera. The first category is a neurosurgical problem and is mentioned here only to emphasize its importance as a cause of intractable pain of the trunk and extremities. When the other lesions cannot be removed surgically, the pain must be managed by chemical or surgical interruption of pain pathways. The neuralgia pain due to cancer of the vertebrae, paravertebral region, and other somatic structures can be adequately controlled with subarachnoid alcohol block, or paravertebral injec-

tions. The best results with subarachnoid alcohol block are obtained in pain of the trunk because when properly executed, relief of pain can be obtained without danger of complications such as involvement of the extremities or bladder and rectal sphincters.

Case 6.—A. W., a white woman, forty years old, had a radical mastectomy performed December 30, 1949. About five months later she started to have generalized metastases, and on August 18, 1950, experienced a severe, bilateral girdle-like pain radiating around the side to the region of the umbilicus. The pain was excruciating, preventing her from moving and necessitating a general anesthetic in order to transfer her to the hospital. X-rays revealed a compression of the tenth thoracic vertebra with narrowing of the interspace. A subarachnoid block was done at T-9 and 10 with 0.5 cc. of alcohol injected in each segment. This afforded her complete relief of pain on both sides which lasted until her death. There were no complications.

Pain due to other lesions of somatic structures may be relieved with intercostal block. For extraspinal injection of somatic nerves 6 per cent ammonium sulphate may be tried before alcohol is resorted to because occasionally it produces relief of pain of sufficient degree and duration without producing chemical neuritis.

Pain of visceral origin is best treated by paravertebral or prevertebral injection of sympathetic nerves. If a thoracic viscus is the source of pain, paravertebral block of the upper five or six sympathetic ganglia may be effective.

Case 7.—J. W. H., a man, fifty-eight years old, entered Tacoma General Hospital on March 30, 1951, for management of severe, intractable pain in the epigastrium, substernally, and in the back which was due to a carcinoma of the esophagus that had invaded the trachea just above the carina. On April 2, 1951, block of the second, third, fourth, and fifth thoracic sympathetic ganglia with 0.15 per cent pontocaine, produced complete relief of pain. This was repeated the next day with xylocaine-alcohol. Relief lasted for four months.

Pain in the Pelvis, Lower Back, and Lower Extremity

Pain in the pelvis, lower back, and lower extremities frequently accompanies metastatic or primary tumors of the lumbosacral spine, or advanced inoperable or recurrent malignant tumors of the pelvic viscera, which produce visceral pain and later lumbosacral neuralgia (sciatica) as a result of involvement of the lumbosacral plexus or the nerves forming it. In most of these cases the severe pain can be relieved by subarachnoid alcohol block. Unfortunately the use of this procedure in the lumbosacral region is accompanied by deafferentation and occasionally by weakness or paralysis of the lower extremities and the bladder and/or rectal sphincters. The latter are serious complications which can and should be prevented by using proper technique and small volumes. When these occur they should be managed properly. It should be emphasized that this danger should not deter one from using the technique. In some cases paravertebral or caudal block can be done first with local anesthetics and then with 6 per cent ammonium sulphate.

Case 8.—M. H., a white woman, forty years old, had an abdominal perineal resection in October, 1951, for carcinoma of the rectum. In February, 1952, she began to experience sharp, lancinating pain at infrequent intervals which became progressively worse both in duration and severity. When she was seen seven months later she complained of constant, burning aching pain in the low back, deep in the pelvis with radiation to the posterior thighs. The pain was so severe that it required codeine with aspirin every two to three hours. Subarachnoid alcohol block produced partial relief of pain. The procedure was repeated three times before complete relief was produced.

Summary

The pain associated with advanced inoperable or recurrent malignant lesions is a difficult clinical problem which should interest every physician. The anesthesiologist can make a significant contribution to the management of this problem by applying his knowledge, skill, and dexterity in using regional analgesia. Analgesic block, when properly executed and effective, affords adequate relief without adding to the patient's discomfort.

For pain of the face, mouth, tongue, throat, and neck, alcoholic injections of the trigeminal nerve or its branches, the glossopharyngeal and vagus nerves, and/or the upper cervical spinal nerves are usually very effective. Pain below the neck can be controlled for weeks or months with subarachnoid alcohol block, paravertebral block, or injections of peripheral or intercostal nerves. Since in many of these cases the sympathetic nervous system is involved in the pain mechanism, sympathetic nerve blocks are occasionally necessary to completely alleviate the pain.

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The Responsibilities of Local Health Departments in Cancer Control

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THE specific responsibilities of local health departments relating to cancer control will be clearer if there is an understanding of the general responsibilities of health departments and of the problems and ideas complicating the establishment of local health department cancer programs, which will satisfy people with special interests in cancer.

Local official health departments are made up of specialists in public health administration, public health sanitation, public health nursing, the recording and analysis of vital statistics, as well as others in the fields of dental health, nutrition, laboratory service, maternal and child health, health education, industrial hygiene and so on. These people are trained to operate as a unit, to diagnose the health hazards of a community, pretty much as a private physician diagnoses the ills of an individual patient. This function is required by law in most states. Certain procedures are also set up by law in most areas to assist in this diagnosis. I refer specifically to regulations requiring the reporting of births, deaths, stillbirths, and contagious and other diseases, including cancer, to the local health department. I refer also to provisions in the laws of many states which give health authorities the right to inspect certain private as well as public premises in a search for conditions which are, or may become, a menace to the health of the public.

Another job of a health department is to promote the use of community resources and the cooperation of interested community organizations in the elimination of the public health liabilities uncovered in the diagnosis. A good health department will enlist the assistance of all interested private and public agencies in the community, in the establishment of an accurate diagnosis as well as in the initiation of corrections. Agencies called upon most frequently are the medical societies, the dental societies, the nurses groups, private health agencies like the cancer groups, tuberculosis associations as well as official bodies like boards of supervisors, city councils, township boards, et cetera.

The remedies, once undertaken, are pushed to their logical conclusion and followed by health department recommendations to the community to provide a program for the prevention of the recurrence of these health menaces or the development of new ones. In this operation, too, the health department serves the community pretty much as a private physician serves his patient. The correction of current health conditions in the community and prevention of new public health hazards are functions pretty clearly defined by law in the statutes of most states. In effect, then, the health department is the physician or health counselor for the community in a relationship resembling that of physician and patient.

Local health departments are interested in making the diagnosis of the community cancer situation. In making this diagnosis we need the assistance of the practicing physicians in the community. If cancers are not reported to health departments as they are found by physicians, the extent of the problem will never be known. Cancer morbidity reporting leaves much to be desired at this time.

Practical experience indicates that it is next to impossible to initiate community action for the eradication of all community-wide diseases or ailments at one time. Health departments press for action where the returns in terms of reduction in sickness, and death rates, and economies effected, will be the greatest for the taxpayer's dollar spent. This must be recognized by the many groups with special interests.

Official health agencies rely upon research to produce the remedies that are bought by communities. Economical and effective procedures have been made available by research for the curtailment of many diseases. Proper toxoids and drugs have been perfected which have been applied to populations to the point that diphtheria epidemics are almost a thing of the past. The same applies to the production of vaccines for smallpox and typhoid fever. I think we can point to an entirely different kind of research that made possible the elimination of typhoid fever. This research was in the methods of water purification.

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Research produced the pasteurization of milk, which in turn proved to be economical enough in its application by health departments and others, and effective enough, to warrant its widespread adoption throughout most of the urban communities in America. This resulted in a decline in the gastrointestinal infections, undulant fever and other diseases, all attributed to contaminated milk supplies. The vaccination of dogs to prevent rabies has been an effective way of eliminating this disease. Prompt hospitalization with rather effective treatment developed by research, along with case contact follow-up, has been found to be a very effective and economically reasonable means of curtailing tuberculosis. Some signs are appearing on the horizon to show that further research in therapy, through new drugs, might bring the elimination of tuberculosis much sooner than we had any reason to anticipate a few years ago. Use of these drugs will then be another tool that will be advocated by health departments. I might also point up the use of fluorine in drinking water as a means of preventing tooth decay.

And so it goes and so it will continue to go, with local health departments stimulating community action to attack community-wide afflictions just as soon as economical, effective means are made available. In many instances these attacks have been successful and the problems forgotten by most people. In practically all cases, however, the battle is a continuing one. If the forces in the community, rallied by the health department and others, do not maintain a continuous campaign against most of these preventable diseases, we have accumulated experience enough to show that these community ailments will return in all their terrible aspects. Tuberculosis, typhoid fever, diphtheria, and so on, can be held in check by this perpetual battle so that there are now many diseases, described by some as the inevitable diseases, which have assumed positions of prominence in the ten leading causes of death. Many have seen the recent news article in which the Michigan Department of Health released statistics on comparative populations and leading causes of death in 1900 and 1950 (Table I). We must not forget the preventable diseases, in a fruitless attack upon those which, at the moment, seem inevitable.

I am sure that the reason heart disease, arteriosclerosis and cancer fall into the class of inevitable diseases, in the minds of some, is simply because the means of preventing them have not been discovered. Some of the mental ills under attack in some quarters, in programs of current popularity, might fall into a similar category. No community can control cancer by preventing it. A practical means of preventing most cancer is not available. At this time it is not a preventable disease by time honored health department standards. The health department philosophy of using its available "ounce of prevention" for "a pound of cure" does not apply to cancer. Other sicknesses present a similar problem.

TABLE I. LEADING CAUSES OF DEATH, 1900 AND 1950.

	1900	1950
Population	2,420,982	6,371,766
Illness		
Diphtheria	529	2
Scarlet Fever	272	1
Smallpox	9	0
Typhoid Fever	869	5
Whooping Cough	208	28
Measles	342	28
Pneumonia	2,388	1,358
Heart Disease	2,836	20,521
Cancer	1,460	8,685
Tuberculosis	2,500	1,270
Premature Birth	620	1,096
Diarrhea & Enteritis (Under 2 years age)	2,337	138

I do not mean to imply that absolutely nothing can be done as a part of the local public health program in heart disease, arteriosclerosis, mental disease and cancer. There have been some very, very limited areas in which we have been given word on how certain cancers can be prevented. We are all familiar with the benefits associated with the correction of poorly fitted dental appliances, postpartum repair procedures, the removal of chronic irritations of one sort or another, and the use of non-carcinogenic chemicals in industry. These, however, are just scratches on the surface. By and large, the field which has promised most from the standpoint of practical application of a community program in cancer control, or should we say the retarding or prevention of cancer deaths, has been early diagnosis and prompt, proper treatment of cancer, once it occurs. I don't have to review the overwhelming evidence to show the value of early diagnosis and prompt, proper treatment. I should like to state my belief that in implementing this rather important device of early diagnosis and prompt, proper treatment, we in the health department have one tool that has been proven effective and economical by health department budget standards, and that is public education. This one important health department

tool is shared with several other agencies. They are the schools, the press, the radio, television, and community agencies concerned with the education of adult groups.

Some local health departments have been and are now involved in different ways in "detection center" services and "cancer clinic" programs. A detailed evaluation of this sort of activity cannot be made at this time. I should like to emphasize, however, the rather strong belief of many health officials that the actual services involved in providing the diagnosis and treatment of cancer are the business of the medical practitioners and related diagnostic and therapeutic groups. Most communities have these people available and have already provided them with the resources needed for cancer diagnosis and treatment. Where this is not true, the health department can best serve by avoiding involvement in cancer diagnosis and treatment *per se,* and by joining in the fight, or leading it, if appropriate, to procure physicians and the proper facilities required. Many health officers are convinced that doctors working in their own offices, and in well staffed and equipped general community hospitals can do this job very well. I am of the same opinion.

While proper handling of cancer education is stressed in all acceptable community nursing programs, there is some controversy about how much public health nurses should become involved in case finding and treatment follow up in a program of field visits. Many feel that the most productive field services are those which serve many people, that is, in which the "public" health is involved. Tuberculosis and venereal disease visits are easily placed in this category. New cases of disease are prevented when tuberculosis and venereal diseases are treated early. We have no evidence at this time that early treatment of one cancer case prevents the development of new cancers. Contagious disease nursing service is supported by law in many areas and required in others. This is not true for cancer, heart disease, arteriosclerosis, diabetes, and many other ailments. For these diseases, too, case finding and treatment follow up by the public health nurse might also seem important to special groups. Funds and staff are far short of what would be required to meet such a program. Further study of this type of service seems warranted. Where a visiting nurse type of program is available, bedside services have been customarily given. Health departments have volunteered clerical services for cancer programs. Community organization and administration "know how" has been furnished private cancer agencies working on community cancer projects.

I should like to repeat my previous statement to the effect that the local official health agencies' most appropriate contribution at this time can be made in health education wherein early diagnosis and proper, prompt treatment must be stressed.

It is my personal opinion, however, that the public has not been given a very practical approach to this part of the problem. At the 1951 session of the House of Delegates of the Michigan State Medical Society, I spoke against the adoption of an endorsement of the "annual physical examination" as a personal health supervision procedure of great merit. At that time I suggested an alternate plan of continuous personal medical supervision which will be repeated in more detail in this paper. May I say again that I think that emphasis on the annual physical examination or an annual examination for cancer detection or the annual or semi-annual detection of any of the other diseases previously discussed, leaves much to be desired in promotion of early diagnosis and prompt, proper treatment. If is my belief that economically, the "annual physical examination" approach is not practical or possible. There is an end to the amount of money that the average person can spend to determine that on a certain day each year he and his family are apparently free of or in the early stages of certain diseases. We all know that trouble can start the very next day. I am also concerned about finding enough physicians to embark upon such a program, if the American people ever subscribed to it. What is more, if there were enough physicians to implement such a program, I wonder what we all really think the quality of such an examination would be, recognizing the stupefying, deadening, dull load that such a routine becomes in the hands of any physician.

It is time that the medical profession familiarize the American public with a program of personal health supervision that has been known to the practicing medical profession for many years. It is in effect a good initial history of the patient and his family, followed by a physical examination. This is supplemented in turn by laboratory and other diagnostic procedures economically feasible and available. A part of this program includes continued association of the patient and his physician or group of physicians. This results in the

accumulation of more history and physical data as the opportunity arises in the treatment of current episodes of illness, injuries or pregnancies, et cetera. This in turn is supplemented by a schedule of return visits and special type examinations at the various times or ages where medical men have found the bulk of biologic mishaps occur in the life span of the individual. This total procedure might be started at whatever age the patient is first seen by his physician. The next history and physical, et cetera, could be supplemented by a history and physical secured from the physician, or group of physicians, involved in the earlier treatment of the individual.

In an ideal situation, a pertinent examination would be given the newborn infant by the family physician, obstetrician or pediatrician, or all three working in concert, depending upon what services were contracted for. The examination would be for biologic deviations most often encountered in the first few hours, days, or weeks of life, serologic tests, et cetera. The examination would be preceded, of course, by a history of the family, secured from the mother in the prenatal period, or in the practitioner's association with the family through the years. This might be followed by a series of visits for immunization procedures designed to protect the youngster against diphtheria, smallpox whooping cough, tetanus and the like. On each visit, the patient would become better known to the physician. Important historical anecdotes would be compiled in the record. Physical defects such as congenital hearts, hip deformities, et cetera, would have been long since noted and plans for correction made. Succeeding events and family history might determine that such a patient would next be seen by the physician at "entering kindergarten age" or "preschool age," for a renewal of the immunization procedures. At this time, one might expect the submission of a urine specimen for study to detect diabetic tendencies or other urinary disturbances, a skin prick for anemia studies, and other tests. In the meantime, information gathered in visits concerning any of the minor contagious diseases, or major contagious diseases for that matter, would be added to the data, compiled in the history. A fall and a lump or a bump here and there would give the family doctor or the group handling the patient another opportunity to know the patient better. The physician's knowledge of what the parents do in the community, what kind of individuals they are, would be invaluable in detecting early tendencies toward mental disturbances in this youngster. This knowledge might permit correction of habits of mama and papa in time to prevent development of mishaps in the mental development of the child. Unless a tuberculin test were in order, as detected through family history, it might not now be necessary or practical to see this individual for a while on planned visits unless booster "shots" were necessary to renew immunizations. Urines, hemoglobins, or serologies could be checked at certain ages. A small chest film might be planned on occasion if not taken in the meantime. Vision, hearing, and other tests should be done at the proper biologic time. It is conceivable that a young lady undergoing a premarital blood examination might be checked for pelvic measurements, to determine whether pregnancy would or would not create difficulty, and for lung conditions, anemias, urinary disease, as well. The supervision might then be picked up at subsequent pregnancies. A blood pressure determination, a gall bladder x-ray, a heart check including an electrocardiogram with a cancer detection check at age forty-two would seem to me to be a better investment for an overweight individual than ten non-specific "annual" examinations between ages thirty and forty. If money and professional time were not squandered in fruitless annual examinations, it's quite possible that there would be money and professional time enough to do the required and planned cancer detection checkups at much more frequent intervals, at ages when they would be most productive.

It is not my intention to outline here a proper and complete course of medical supervision for any or all individuals. It is merely my intention to describe here what most physicians will recognize as good common-sense medical supervision, embracing a practical relationship between the physician and the patient, or group of physicians and the patient. A standardized calendar of what should be done in this program might well be worked out eventually.

I do not mean to imply that an annual physical examination program is without result. What I do mean to say is that if we were to devote as much energy toward promoting this program of continuous supervision, as we do in pushing annual or periodic physical examinations and so-called multiple screening procedures, the results might be better and might be achieved more economically. It is my belief that not only would re-

sults in the specific diseases we have been discussing here be better but improved relationships of the patient with his physician or group of physicians as just described would produce immeasurable benefits in other respects. Economic solvency and a sound mental outlook would be possibilities. The number of hypochondriacs might be reduced.

I recognize that the solution of this problem does not lie entirely with the education of the layman. This preventive approach to medical care and health supervision must be instilled in medical students as they are graduated from our medical schools throughout the country. The application of timely, productive, biologically indicated tests and procedures designed to detect diseases in the pre-clinical stages must become a practice with all of our newly graduated physicians and must become an objective of the postgraduate training given to the physicians graduated in prior years.

What I am advocating is the continuous association of the patient and the physician or group of physicians after the association starts. This relationship should hold for unplanned medical care as well as for a planned program of specific economic examinations and tests designed to capitalize upon medical knowledge of the calendar of biologic mishaps, rather than a series of physical examinations arbitrarily set for each twelve months or any other regular periodic interval. Local health officers and health department people, with their knowledge of administration, economics and community organization should co-operate with the practicing physicians in drawing up such a program and in helping in its sale to the public.

Local health departments everywhere are under pressure to augment programs concerning heart diseases, mental hygiene, cancer, arteriosclerosis, multiple sclerosis, infantile paralysis diabetes, epidemic jaundice, infant diarrhea and home injuries, to name but a few of the scourges that remain unconquered. Most health departments will give cancer and other programs additional emphasis whenever methods can be devised that will be productive enough to meet the standards of economy and effectiveness I have described.

Summary

1. Local health departments are required by law to diagnose as well as to recommend treatment and prevention for community ills and health hazards much as a practicing physician diagnoses and recommends treatment and preventive measures for a patient.

2. The accuracy of the health department's diagnosis of the community cancer situation is limited by poor reporting of the disease.

3. Early diagnosis and prompt, proper treatment of cancer is imperative. It can best be accomplished by the medical profession and its auxiliary groups in private offices and general hospital type facilities already found in many areas. Health departments should help in the procurement of these facilities where they are inadequate. Other specialized health department services such as case finding, treatment follow up, and the like require further study before they are advocated as economical, productive procedures.

4. Cancer prevention knowledge is too limited to permit a full scale major program of prevention by local health departments.

5. The most productive local health department effort in the entire cancer field, at this time, appears to be in public education, for early diagnosis and prompt, proper treatment.

6. A deviation from the standard program of regular periodic physical examinations for disease detection and personal health supervision is suggested. This program involves an initial history and pertinent examination along with continued association of the patient and physician or group of physicians. This relationship is to include emergency care as well as a planned program of special examinations and tests designed to capitalize upon the medical knowledge of the timing of biologic mishaps in the life span of individuals rather than examinations at arbitrarily set intervals.

It is fairly common experience to find that the first node biopsy in a case that later proves to be Hodgkins' disease will be called some type of non-specific lymphadenitis.

* * *

Early diagnosis is the real keystone to any sizeable reduction in mortality of cervical carcinoma. From 75 to 90 per cent of patients in early stages of carcinoma can be saved by adequate treatment.

An adequate pelvic examination can be done by a physician who has a speculum, a good light, a healthy curiosity, and an earnest desire to give the patient the full benefit of his knowledge.

* * *

The condition of the female pelvis will never be known if a pelvic examination is not made.

Is Progress Being Made in Cancer Control?

By C. Allen Payne, M.D.
Grand Rapids, Michigan

ALTHOUGH cancer control is still in its infancy, some three decades have gone by in which a gradually increasing awareness of the problem has occurred as the result of a well-established public and professional educational program. It seems important, therefore, to study the results from time to time to check its efficiency and so that modifications might be adopted to meet the changing needs.

Anyone who reviews the subject of cancer control must be impressed by the vast scope and complexity of this important public health problem. No writer to my knowledge has attempted a comprehensive review of the evidence which would give an affirmative answer to the question. Briefly, let us consider the facts that point to progress in the reduction of human suffering and needless deaths from this disease.

One of the difficulties in a study of this kind is the lack of reliable data upon which to base sound conclusions. Years must elapse before the results of newer methods of treatment can be properly evaluated. There is a dearth of morbidity and incidence data on cancer. The follow-up of patients who have had some form of cancer is very laborious and time consuming. The study of the control of cancer has necessitated the development of new techniques of many kinds. As a result, our information on the effectiveness of the program is somewhat fragmentary.

In discussing the evidence for progress in cancer control, let us consider three types of information.

First.—Enough time has elapsed since the beginning of the public education program to permit a comparative study of reasons for delay in diagnosis and treatment in past decades and at present. Several studies of this nature have been carried out, notably one at Memorial Hospital, New York City, by Dr. George T. Pack and his group. In comparing cases from 1923 through 1938 with those of 1946 through 1948 they found definite reduction in delay in diagnosis and treatment largely due to lessening of the time between onset of first symptoms and first consultation with a physician. In other words a better informed patient is reporting to his or her physician earlier in the course of the disease. There has been little improvement in this respect in 1947 and 1948. However, definite improvement on the part of the physician has occurred in 1947 and 1948 by the lessening of the time between the first visit and the diagnosis and between diagnosis and application of treatment.

A similar study carried out in Massachusetts comparing cases in 1927 with similar cases in 1945 shows a reduction in delay in diagnosis and treatment from 11.9 per cent to 6.2 per cent or an improvement of about 52 per cent. Both of these studies are encouraging in that they show the average man and woman are much more aware of the manifestations of cancer and are reporting to their physicians earlier when a higher percentage of successful cures may be carried out. These findings also indicate that diagnostic and treatment facilities are being used more extensively by physicians. In my opinion much of this improvement in the awareness of cancer must be attributed to the public and professional education campaign of the American Cancer Society.

Second.—Another approach to answering this question is the professional analyses of series of cases, past and present, to see if more people are being saved and cured by cancer by present-day methods. Physicians use this method in evaluating the newer forms of treatment of various types of cancer. A standard method of reporting results is the five-year survival rate. This is an arbitrary method designed to make results of treatment methods available as soon as possible. By using this method of analysis many forms of cancer have shown marked improvement in survival rate and even cure.

One of the most dramatic improvements is in carcinoma or cancer of the female breast. A recent report by Dr. Stewart Harrington of the Mayo Clinic shows an improvement in five-year survivals from 39.7 per cent in 1941 to 62.4 per cent in 1944. Many of these cases, of course, lived longer than five years. An even more significant finding of Dr. Harrington's study was the much higher survival rate in those cases which were seen and diagnosed early. In this group 85.6 per cent of

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Dr. Payne is Pathologist, Blodgett Hospital, Grand Rapids.

patients survived five years or more. These facts are eloquent proof of the importance of *early diagnosis* in successful treatment not only of carcinoma of the female breast but all forms of cancer. There are a number of similar reports from other medical institutions showing definite improvement in the five-year survival of cancer of the female breast. One such report from Columbia University by Drs. C. D. Haagensen and A. P. Stout shows improvement in the five-year clinical cure rate from 26.6 per cent in 1915 to 52.2 per cent in 1942. Again this report noted that the more localized or earlier the case, the better the prognosis; in this case, 71.6 per cent.

Cancer of the uterus or womb has likewise yielded increased five-year survival rates when treated by present-day methods. A report by Dr. J. P. Palmer from Roswell Park Memorial Institute shows 28.6 per cent of cases treated in 1916 lived at least five years compared to 40 per cent of cases treated in 1940. Even more encouraging results have been reported more recently by the combined use of radiation and more radical surgery.

In cancer of the cervix or mouth of the womb the results of newer methods are equally encouraging although not as dramatic at this time. One author from Sweden reports an increase in cure rate from 22.6 per cent in 1914 through 1927 to 42 per cent in 1938 through 1944. Again it must be emphasized that the earlier cases gave five-year survivals as high as 71 per cent. American authors also report definite improvement in five-year survival rates in recent years. The Papanicolaou smear test, which is now generally available, is a potent method of finding very early cases even before the patients have definite symptoms. It is hoped that as a result of this improved case-finding technique the percentage of very early cases will be sharply increased with a corresponding improvement in five-year survivals and cures.

Dr. George Pack of Memorial Hospital, New York City, has reported on prognosis of cancer of the stomach at that institution. Comparative studies in a twelve-year period revealed an improvement in prognosis or outlook of 400 per cent. The cure rate is still too low but the trend toward improvement is definitely upward due to the public education campaign acquainting persons with the early signs and symptoms of gastric cancer, the more widespread and urgent use of x-ray studies of the stomach and intestine and the more widespread use of more radical surgery.

Many other forms of cancer, especially those of the skin, larynx, mouth and lips have also yielded to present-day methods but the results are not so dramatic since they represent much smaller parts of the entire problem. One point, however, bears re-emphasis; that the earlier cases are diagnosed the better is the chance for cure.

Third.—Another category of evidence which points to definite progress in cancer control is the state and national mortality statistics. Annually over 200,000 Americans die of some form of cancer making it now the second most common cause of death in comparison to tenth most common in 1900. If present trends continue this annual toll will probably double within the next fifty years. A number of reasons explain this marked increase.

1. Deaths from common childhood infections, tuberculosis and pneumonia, have been sharply reduced thus raising cancer relatively on the list of the causes of death.

2. Although cancer may occur at any age it it much more common in the older people especially from fifty to seventy-five years. Since 1900, the age distribution of our population has changed sharply with increase in the group forty years and older, so that at the present time about 35 per cent of our people are in this group. These facts can account for a considerable proportion of the increase in cancer deaths.

3. Other factors such as better diagnosis and perhaps an actual increase in cancer incidence could account for the remainder of the increase in mortality.

When, however, we make an adjustment or correction for the changes in population the picture is much more hopeful. The age corrected death rate from cancer in females has shown improvement in recent years amounting to about 4 per cent per decade. This decrease in cancer deaths may be attributed to better medical care and earlier diagnosis and treatment. The most consistent and longest improvement has been in cancer of the uterus or womb. Dr. E. C. Hammond of the American Cancer Society Statistical Research Department reports that deaths from this type of cancer have been decreasing for the past fifteen years. Furthermore it is his opinion that the actual decline is even greater than is indicated by the official figures. More recently cancer of the female breast has shown some decline.

The male age-adjusted death rate from cancer

on the other hand has shown an increase in recent years although this increase is diminishing yearly. The Metropolitan Life Insurance Company statistics reveal no change in the crude death rate from cancer for 1950 and 1951. When, however, allowance is made for the increase in the proportion of older people the mortality actually shows a decrease of 2.5 per cent for white females and a small fraction of a per cent for white males. This is the first time there has been a decline in the death rate for cancer among males. One swallow does not make a summer and a fractional decrease during one year does not establish a trend. It is a justification for optimism, nonetheless, and for a renewal of our efforts.

A twelve-year-study of cancer control methods in Connecticut revealed the age-adjusted male death rate up to 1946 rose at first and then leveled off, while the female age-adjusted death rate has fallen. The conclusion of this study was that the gradual leveling of the total age-adjusted mortality rate in Connecticut was an encouraging sign.

The Michigan crude death rates for cancer of the breast, uterus and digestive tract for females also show a mild but consistent improvement between 1940 and 1949. Dr. Ian MacDonald reporting cancer mortality for California says that there is a significant decrease in the age-adjusted rates for the first time in this century, especially in the female.

Still another category of evidence and experience in the professional work of physicians and others in this field is convincing beyond doubt that definite progress has been and is being made against this important public health problem. These findings are less tangible and cannot be reduced to figures but are nonetheless important in our all-out battle. I should like to enumerate the more important trends.

1. Special cancer clinics for diagnosis and treatment are increasing in number. In 1933, 140 such clinics were approved by the American College of Surgeons. In 1951, this number was 661.

2. Practically all medical schools have a "Cancer Co-ordinator" on the faculty—a physician to correlate and co-ordinate the instruction of undergraduates in cancer control.

3. Practically all state and national medical gatherings have one or several presentations concerning some phase of cancer.

4. Many county and state medical associations have developed special programs and clinics devoted entirely to cancer in its many aspects.

5. Schools of public health are offering courses in cancer control.

6. Many high schools and even some grade schools are devoting some time in classes on biology and physiology to a discussion of cancer. These are the cancer patients of tomorrow.

7. There is widespread interest aroused by the numerous articles appearing in daily newspapers and weekly and monthly periodicals.

8. An increasing number of physicians are applying for an increasing number of fellowships devoted to special training in the diagnosis and treatment of cancer patients.

9. Some local health departments are actively participating in the public and professional cancer educational programs.

10. Efforts have been made in many states to make cancer a reportable disease so as to make available badly needed adequate morbidity or incidence statistics.

11. Research has not yet discovered the cause or causes of cancer, but much helpful collateral information has been obtained. Special progress has been made along the line of finding drugs and chemicals which are useful in delaying death and even curing some types of this disease. There is great hope that even more effective chemicals to cure cancer will be forthcoming. The possibility of one or more relatively simple laboratory tests to detect all forms of cancer is also very promising. Time does not permit other additions to this list.

In conclusion it seems to me that we can give an unqualified *yes* in answer to the question raised by the title of my presentation. The evidence I have cited indicates to me and the others working in this field that we are on the right track. The program of public and professional education as conceived nationally and implemented and carried out locally in the state divisions and county units of the American Cancer Society by the numerous county and state medical associations and by the local and state health units is beginning to bear fruit. We can take great pride in what has been accomplished by our voluntary organizations and methods, and greater encouragement to increase our efforts to bring cancer completely under control. Methods are available today to still more sharply reduce death and suffering from cancer. Research tomorrow will point the way to even more effective ways to control this disease.

Cancer Control--The Price and the Payoff

By E. Margaret Siebert
Lansing, Michigan

ON THIS program you have heard physicians, outstanding in their fields, discuss the scientific aspects of cancer control. I have been asked to speak as a layman. If I can, in that capacity, contribute something, it will be to sell a job of education in control of cancer to individuals and groups, wherever and whenever opportunity presents itself.

The problem of cancer control presents a serious challenge to the security and welfare of all mankind. It is a problem that, in greatest measure, each person must solve for and by himself. In theory and often in practice, it takes only the individual and his physician to solve each cancer problem.

Every intelligent person of high school age and over should be able to answer correctly the following questions:

Are you aware of the cancer problem, and the dangers to the individual when neglected?

Do you know that cancer is an unruly growth of the patient's own tissues?

Do you know that the disease is neither hereditary nor contagious?

Do you know that there is no social disgrace in having cancer?

Do you know that early, and only early, cancer is curable?

Do you know that the periodic examination by the family physician is the best safeguard against development of cancer to the incurable stage?

Do you know the seven danger signals and that you should consult your physician as soon as any one of them appears?

Do you know that surgery, x-ray, and radium are the only accepted methods of treatment?

Do you know that these facts, when known and applied by everyone of high school age and over, will go far in preventing many cancer deaths?

The person who knows the answers to the questions just listed and then takes action when action is indicated is making a real contribution to the control of cancer in his own body and is helping to solve the cancer problem in his community.

Read at the Fourth Michigan Cancer Conference, East Lansing, Michigan, October 9, 1952.

The Price of Cancer Control

It takes so little time to learn the facts regarding the control of cancer. Daily newspapers and magazines contain information on many cancer problems, some of it valuable and some of questionable merit. Some a little gruesome in its details but all intended to arouse public opinion to what the individual can do to protect himself.

The periodic medical examination by your own physician is your greatest bulwark against a fatal experience with cancer. It takes so little time in comparison to the time given to other things which form a part of all our busy lives. Every piece of mechanical equipment in your home or on your farm receives far more attention than you give yourself, and you wouldn't think of neglecting it because you place a money value on these things and feel they are essential to your scheme of living.

Women are particular in planning regular cosmetic care and spend many hours getting such care; also spend many more dollars than would be necessary to pay for a periodic medical examination. Men, too, find time for attention to any and everything they deem important but which all too seldom includes that periodic visit to their physicians for a careful and thorough evaluation of their physical status.

What about the expense of keeping well? There is no comparison between the costs of health care and those of our ultra-refined living standards that are considered "musts" of today. It has been determined that an individual's cost to society up to graduation from college or until he gains maturity, in pre-inflation dollars, is at least $20,000. And just recently I heard an economist say that every child comes into the world owing more than $1800 in taxes. Surely such an investment justifies protection through health care.

We care for our pets more conscientiously than we do for ourselves. Even the automobiles we drive receive far more attention and we spend more on them than we do on our health maintenance. We are inclined to put off a warning signal that all may not be well with us because we are too busy. Our daily schedule is too full with social affairs. We have a trip planned, we are busy building a new home. We will do it after the holidays— and then it's the income tax or a new spring hat.

It is a human trait to neglect ourselves. We

put off to the far distant future that most important attention which could well make the difference between the privilege of continuing to enjoy the many activities we deem essential to our well being, or the misery of a long illness, worry, unhappiness and perhaps death from cancer.

The Payoff

Don't let fear keep you from your doctor. When you sit down with him, remember he is on *your side*. Your visit and his examination may spell the difference between physical improvement or increasing impairment or you may hear the good news: "You are O.K., see you next year." Wonderful words, and the most effective stimulus to a long and happy life.

It has always seemed to me that the best "health sales" and the ones that stayed sold the longest were those made with a combination of sympathetic understanding of the problem at hand plus some pure, honest, convincing persuasiveness.

There is hope in cancer control in spite of the fact that from 1900 to 1950 cancer deaths increased from 41,000 to 210,000. Of more significance is the constant rise in the cancer death rate —the number of such deaths per 100,000 population—which increased from sixty-four in 1900 to nearly 140 in 1950. Some major reasons for this increase are the increasing length of life which finds a larger percentage of the population in older age groups and improvements in diagnosis that makes it easier to find cancer than ever before. Death rates for cancer in certain tissues in women have decreased in recent years. There is, as yet, no such favorable indication for cancer in men.

Cancer deaths can be reduced by four means: (1) Early diagnosis; this is primarily the responsibility of the patient and secondarily the responsibility of the physician to see that the answer to the patient's problem is obtained. (2) Adequate and prompt treatment once the diagnosis has been established. (3) Discovery of newer and more effective means of treatment. (4) Ultimate discovery of the causes of cancer.

The last two results must come from research laboratories and clinical investigations. From these stem the basic principles of a cancer control program of education, research and service of health agencies, the American Cancer Society, private enterprises and private philanthropies.

The value of early diagnosis and prompt treatment is emphasized by the following experiences:

In my limited circle of friends, there are two—a man and a woman—who in their regular habits of personal health care were alerted to the need for further examination by those they consulted in their respective professions.

The woman, after a long and brilliant record of service as a major in the Women's Army in the second World War, returned to civil life. In her preparation for a position, she went to her optometrist for eye refraction. During the examination he discovered a condition which he deemed required further diagnosis, so he promptly sent her to an eye physician. A malignancy was found, and within forty-eight hours surgery was performed. She is working, holds a very responsible position, even returned to her university for her master's degree, and stands a more than good chance for a long and happy life.

The man I refer to was advised by his physician to go to his dentist for dental care. The dentist advised further diagnosis and promptly sent him to an oral surgeon. In that examination malignancy was discovered. Surgical treatment followed immediately. After what appeared to be a relatively short convalescence he returned to his job, that of a civil engineer.

These are but two cases, and I dare say all of you could relate similar experiences in the lives of persons you know.

The important part of this story signifies that these two people availed themselves of health care. And it was both fortunate and important that the professional advice and care they received came from doctors well qualified to recognize the need for further diagnosis and felt their responsibility to the patient by prompt referral for further treatment.

Cancer control can be brought about by first selling yourself on the merits of the program. You are the most important person in your life. After selling yourself go that undemanded mile and sell it to and through the organization you represent here today and in turn to your own home community. In our daily pursuits, economic or social, at work or at play, we cross paths with someone we can help to alert for self-protection and to build a defense against death from cancer.

Schools are fertile fields for cancer education. Students of high school age should know the what, why, where, and when of cancer control. Their teachers and all others working together for the

good of young people are concerned not alone with the individual as he is but also with the individual as he will be in time to come. This interest is in evidence in the expanding school health program and the increasing number of community health councils with school representation.

Among the many organizations interested in cancer control I would like to mention one or two with whose work I am intimately acquainted.

The Federation of Business and Professional Women's Clubs has a Cancer Control Foundation Committee on which I serve. Large in membership, the Federation lends its force to constructive objectives to its full capacity. Like many organizations, its members are cancer control minded. As a group they launched a Cancer Foundation Fund, with the slogan, "Let's raise the fund to save our members."

From that slogan you can readily guess the Fund came about through deep sentiment, and as a memorial to members who died from cancer, and also from a genuine desire to aid in conquering cancer and to take part in cancer control.

The purpose in establishing first the committee, and then the Foundation, was: "To provide financial assistance to recognized groups and individuals, qualified to promote the program of cancer control in the State of Michigan, through education, research, or other projects related to the problems of cancer; and that a Fund be established for the Foundation by release of funds from the reserve assets of the Treasury."

All clubs in the Michigan Federation were asked to support the project. The Fund immediately received support, and the committee started making inquiries from various authorities on cancer control education, to increase the value of the Fund. The first step was a Federation Trainee Program to further cancer control education and for self-protection. The members so trained then set up a series of panel discussions.

The Federation was divided into six districts and a panel discussion was held in each district, so that the program was statewide. The effort met with enthusiasm and was well attended. Participating were doctors outstanding in the fields of surgery, x-ray, radium, and pathology; nurses in the field of public health; teachers and directors in physical education, teachers in adult education; county health supervisors; superintendents of schools; public officials; members of the Cancer Society, and the press. All sessions ended up with a general discussion, with questions to panel members. The results were advantageous, and there were positive values. It was a very gratifying experience.

In passing, let me say the Fund is increasing steadily, and there is always a spark of new interest and a desire to participate in a constructive cancer control program.

It is most gratifying to observe that another group made up of very young college women is making a splendid contribution to cancer control education. Beta Sigma Phi International Sorority has an endowment fund and maintains two full-time scientists in cancer research at the University of Colorado. The work of Dr. C. H. Kelsall and Dr. Crabb has received recognition throughout the world.

I trust you will forgive me for emphasizing the programs of the Business and Professional Women's Clubs and Beta Sigma Phi. It is through my membership in these groups that I have witnessed first hand the beginning of a dream, perhaps, but now a reality, that we can and will meet the test in an overwhelming humanitarian need. The programs of these two organizations give emphasis to the fact that if you can't do enough alone, you can join and share in a group effort. Charles F. Kettering, famous for his participation in and his contribution to research said, "There can be only one mistake, and that is to do nothing."

In conclusion, I urge you to make certain your own security. I appeal to you for *your* self-protection and in doing that you will ultimately help others.

Take a little time—and spend a little—for the most precious thing in your life—your health. Don't do it because I ask it. Do it for yourself. Do it for your loved ones. Do it for a neighbor. Do it for all humanity.

Most lung cancers can be detected at the onset of symptoms or even earlier, for they have a silent phase.

* * *

Most lung cancers cast an abnormal shadow on x-ray film.

Extensive cancers of the lung start as small localized lesions.

* * *

Cancer originating within the lung is the most detectable of all internal cancers.

Detroit Physiological Society

MEETING OF DECEMBER 18, 1952

The Effect of Vitamin B_6 on Hepatic Thionase Activity

Robert Q. Thompson
Parke, Davis & Company

A study has been made concerning the effects of pyridoxine supplementation and of diets which varied in their content of casein or of thioamino acids on the hepatic thionase activity of growing rats. The hepatic thionase activity of rats which had been depleted of vitamin B_6 and subsequently supplemented with pyridoxine has been determined. Furthermore, the effectiveness of pyridoxal phosphate to restore thionase activity in liver extracts obtained from vitamin B_6-deprived rats was examined. The results of these investigations may be summarized as follows:

1. Rats maintained on the semi-synthetic diets supplemented with pyridoxine showed increasing hepatic thionase activity during the experimental period following one week of adaptation to the regimen.
2. A marked and rapid decrease in hepatic thionase activity was observed in rats maintained on vitamin B_6-deficient diets. The addition of casein or thioamino acids to a vitamin B_6-deficient diet containing 20 per cent casein resulted in a more rapid decrease in hepatic thionase activity.
3. Rats which were deprived of vitamin B_6 for 21 days showed a rapid restoration of hepatic thionase activity following pyridoxine supplementation.
4. The addition of pyridoxal phosphate to liver extracts obtained from vitamin B_6-deprived rats restored hepatic thionase activity.

Digestion of Sputum with Nebulized Proteolytic Enzymes

J. Lewis Yates and Ben E. Goodrich
Henry Ford Hospital

Viscid bronchial secretions and exudates are important causes of disability in respiratory disease. Experiences with nebulized trypsin in the treatment of seventeen patients, not responding well to accepted therapy, are presented. *In vitro* study revealed that trypsin was more active on mucus than a streptokinase-streptodornase mixture.

Trypsin was nebulized in doses of 40,000-50,000 Armour units, dissolved in 1 cc. of Sorensen's phosphate buffer, three to four times daily. Average course consisted of five doses over a two-day period. Local irritation was prevented by rinsing mouth and gargling with warm water immediately after each dose.

Tryptic aerosol significantly decreased the viscosity of sputums of twelve patients. One patient's sputum showed slight change, two patients with slowly resolving pneumonia did not have sputum before nor after tryptic therapy. Clinical improvement due to the aerosol was observed in eleven patients, was slight in two, and did not occur in two patients with pneumonia. Four patients noted increased dyspnea because of the effort of inhaling the aerosol. Mild oropharyngeal irritation was noted in eight patients. One patient suffered transient hoarseness. Systemic effects did not occur. Treatment was of greatest value to patients with acute bronchiolitis.

Clinical and Hematological Effects of Triethylene Melamine

Arnold R. Axelrod, Lawrence Berman, and Robert Murphy
Departments of Medicine and Pathology, Wayne University College of Medicine, Detroit, and the Veterans' Administration Hospital, Dearborn, Michigan

The treatment of inoperable neoplasms is a difficult and often disheartening task, therefore discovery of an agent possessing some degree of therapeutic activity in these conditions is an important and welcome contribution. One of the most recently studied agents is 2,4,6-triethylenimino-s-triazine (triethylene melamine, TEM). The similarity of this compound with the active

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More Study and Work Needed to Solve This Problem

In the recent release of Volume I of the report of "The President's Commission on the Health Needs of the Nation," Dr. Magnuson in his letter of transmittal emphasizes the philosophy of the commissioners that "providing good health care starts at the grass roots." I am sure we can all agree with that statement—in other words, the physician and his patient with proper facilities to implement this care, and the health officer and his community with proper facilities for health education, and preventive medicine.

The letter goes on to state that they recommend Federal grants-in-aid to certain activities "because we believe that the role of the Federal Government is to stimulate them, not to control them."

The American Medical Association's Board of Trustees has issued a preliminary statement on the Report of the Health Commission and they find that the "answer proposed for the solution to almost every problem is additional federal funds." They proceed to express the fear that in the background of these endeavors is the specter of Federal control. Obviously there is a difference of opinion as to the objective of Federal aid in the many avenues of health care and right now is an opportune time for a meeting of the minds on this very fundamental principle.

President Eisenhower, in his State of the Union Message, pledged an honest attempt at balancing the national budget and at the same time urged "that state and local governments and interested groups of citizens restrain themselves in their demands upon the Congress that the federal treasury spend more and more money for all types of projects." This would seem to call for a careful screening of all demands on the Federal treasury for any but the most essential spending. No one can deny that the Nation's health is essential, but whatever ails it would not seem to be corrected by the simple expedient of increased Federal aid.

A better distribution of our available medical care is still a problem, but it has been proven in Michigan during the last year that if facilities are provided by whatever means, physicians are attracted to the area and a hiatus is filled in our areas of deficiency. I trust all of us in and out of government can continue to discuss the problems of health care in an unprejudiced manner.

R. J. Hubbell

President, Michigan
State Medical Society

President's



Message

Editorial

WHITHER

WITH THE NEW Congress and new Administration in session, new problems are opened to us. Old ones are still to be resolved and a restudy of our philosophy is very definitely our immediate concern. Our profession and the entire nation are in a constant condition of evolution. Our ideals of yesterday are partially obsolete.

During the past twenty years, there has been a complete change in the ambitions and attitudes of our people. Previously, the American people had demonstrated the value of individual ambition, enterprise, and assured determination to make their way. By initiative, concentration and sustained drive to a new economic goal, the unwanted, transplanted people from the melange of European bypasses had built a great nation able to succor the whole world when the stresses of the past half century came. America was unafraid, capable and willing to tackle every hazard. We asked only fair play and a chance to work out our destiny.

Individually, we hoped to build a competence to care for our declining years, and at the same time provide for our families. We worked until the infirmities of age made us stop, and we were happy doing it. "Security" was to be self-made by individual accomplishment. In the past two decades a new philosophy has seized our people. A new thought has been substituted in our economic life. The main objective of our workers now is for an assured security to come from some other source. Government, or insurance, or the employer must guarantee a fixed income when the time for compulsory retirement comes.

The old independent spirit seems to be gone. As a people, we are a changed group. Considering industry as a whole, we are told the change is for the better, but certainly not for individualists. The present living and working standard is lacking in the quality which built our nation—"DRIVE."

Let your Congressman know your sentiments. Write to him.

FEDERAL LEGISLATION

THE WHOLE picture of life, as it is being experienced now, brings up a program which we have advocated many times, but which might have a chance of passage considering the new faces and urge to serve which are now in Washington. Labor and industry, with the constant urging from government, accepted a program requiring a man of sixty-five (Government officials excepted) to retire. Social Security legislation forced that concept upon us. It is now a recognized part of almost every man's life plans. Employed persons are under the Social Security plan with deductions for old age assistance. A percentage is taken from each wage, an equal amount from the employer, and at compulsory retirement, but not before age sixty-five, the beneficiary will draw a pittance every month for the rest of his life. This is not adequate unless there have been other savings. If the aged worker feels he must continue to earn in order to live, or to retain his sanity, he forfeits all benefits if he earns as much as $75 a month.

We are told this Social Security plan is insurance, is economically sound and that beneficiaries are entitled to promised allowances. If that is true, there is no justification to penalize the worker who is able and willing to help pay his own costs of living.

Several bills already have been introduced in the new Congress to correct this injustice. All restrictions should be removed from Old Age Assistance.

OLD AGE BENEFITS

ANOTHER injustice is in the federal laws dealing with employed persons. This one has to do with all workers in the higher brackets, the profession, the self-employed and the administrative segment. Industry is allowed to retain a certain percentage of the salaries of administrators, invest it in endowment insurance, deduct such sums as business expense, and allow the employed person to pay his income taxes as he receives the money. Professional or self-employed individuals cannot do this. In the last Congress, the Reed-Keogh Bill provided for this privilege, but failed to pass. The Reed-Keogh Bill has been reintroduced. It is rather awkward, requiring the fixing of an insurance arrangement by the professional group interested.

We urged this adjustment to income tax law several years ago as a just and fair equalization measure. At that time, we suggested that provi-

sion be made whereby any Doctor of Medicine, Doctor of Dentistry, Architect, or other self-employed person be allowed to invest up to fifteen per cent of his income, tax free, in a specified Government bond established for that purpose, such bond to carry a moderate rate of interest, and beneficiary to pay his income tax when the bond is paid. In this way the government would have the use of the taxpayer's money over the period it was invested, and the taxpayer would be allowed to build a reserve, the same as the person in industry. We favor the Reed-Keogh Bill. We think the bill could be made more easily workable.

THE CONSTITUTION AND ENCROACHING SOCIALISM

THE CONSTITUTION of the United States provides that treaties or Covenants to be made "shall be the supreme law of the land." Several bills already have been introduced in this Congress to change this provision by amending the Constitution. These should receive our united and unstinted support.

Under this quirk of the Constitution, the International Labor Organization was chartered many years ago and the United States became a member. This membership should be immediately revoked. Through this organization, and some others, the infesting sore of Socialism could be invoked upon us, and gradually we could become, in part, a Socialist or even a Communist state.

Amend The Constitution!

Repeal the ILO!

TIME FOR APPRAISAL*

FULLY one half of the doctors of medicine of this State have practiced their profession only when the healing art has been under pressure. For the past twenty years, there has been a relentlessly directed drive against the medical profession toward the goal of bulk care as a tax-underwritten program. And a very sizable percentage of our people has become indoctrinated in the "philosophy" of increased security in return for a payroll deduction.

This is what Austin Smith, Editor of *The Journal of the American Medical Association,* has aptly termed the "doctrine of individual irresponsibility." It transfers from the man to the state personal obligations which have heretofore been construed as the prerogatives of free men in our American society. In setting its focus or its fuse on the problems of medical care, a tenacle is projected into a field where broad interest by practitioners of the healing art and by laymen alike has long been evident.

There can be no doubt that the mandate of the voters in the 1952 national election runs counter to this philosophy of individual irresponsibility; and to this degree, doctors of medicine are accorded a breathing spell—a time to appraise the basic problems of medical care in these mid-years of the twentieth century. This is the first occasion in the professional experience of most of us when the air has cleared enough to permit careful observation of the health needs of the American people.

There are several broad fields to which especial attention may be directed. One is the so-called maldistribution of physicians. There is a density of doctor population parelleling the density of general population. There is a sparse settlement of doctors where the population is sparse. It has been said repeatedly that the doctor will not locate where the minimum type of facility is represented by the hotel type of hospital-workshop. It must be pointed out that the expansion of a first-class highway system brings the patient closer to first-class medical care, just as it brings him closer to augmented shopping facilities. It might well be that the small community would be better advised to direct capital funds to the purchase of an ambulance than to the construction of a clinic structure. The tremendous expansion of the voluntary prepayment systems in the face of pressure for governmental medicine has been an indication that there is still a stalwart strain of initiative in the American people. But here again problems arise. For instance, do we know whether there is a real need or simply a demand for total medical care within this framework? I believe that the not-too-old economic survey of a large labor union in the Detroit area showed that the dues-paying member was capable of paying the cost of the acute intercurrent illness along with the weekly payments for the family car and the television set, but that economic disaster faced the family when the wage earner was beset by the hospitalizable illness of whatever length and with surgical connotation. Perhaps this area could be clarified by rephrasing the problem as follows: do we provide total medi-

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*Expanded from an editorial developed for the January, 1953, *News Bulletin of the Woman's Hospital,* Detroit.

Wayne University College of Medicine

Postgraduate Continuation Courses

March 16-June 13, 1953

These courses are open to all qualified persons. Veterans receiving benefits under the G. I. Bill should contact Dr. Arthur Johnson, Veterans Administrator at Wayne University, 5524 Cass Avenue.

Registration for these courses should be made in the office of Postgraduate Medical Education at the College of Medicine, 1512 St. Antoine.

ANATOMY			
Surgical Anatomy (Limited to 20 Senior Surgical Residents)	College of Medicine	Tuesday 1-5	$50.00
Regional Anatomy			
a. Head and Neck	College of Medicine	Friday 1-5	$50.00
b. Thorax, Abdomen and Pelvis	College of Medicine	Wednesday 1-5	$50.00
c. Back and Extremities	College of Medicine	Thursday 1-5	$50.00
(Regional Anatomy open also to graduates of Dentistry)			
Problems in Neurology	College of Medicine	Thursday 3-5	$35.00
MICROBIOLOGY			
Parasitology and Medical Entomology	College of Medicine	Hours to be arranged	$50.00
Bacterial Physiology	College of Medicine	Hours to be arranged	$50.00
Microbiology Seminar	College of Medicine	Monday 3:30-5:00	$15.00
PHYSIOLOGICAL CHEMISTRY			
Nutrition	College of Medicine	Mon. Weds. Fri. 8-9	$35.00
P. Chemistry Seminar	College of Medicine	Tuesday 3:30-4:30	$15.00
PHYSIOLOGY AND PHARMACOLOGY			
Survey of Physiology	College of Medicine	Tuesday 4-5	$15.00
PATHOLOGY			
Pathology of Tuberculosis	H. Kiefer Hospital X-Ray Conf. Room Laboratory Room 117	Tuesday 1-5	$50.00
Pathology of Neoplasms	College of Medicine	Wednesday 1-5	$50.00
DERMATOLOGY			
Seminar in Dermatology	Receiving Hospital Farwell Annex Basement Outpatient Dept.	Wednesday 10-11:30	$15.00
Conference on Venereal Diseases	Receiving Hospital Farwell Annex Basement Outpatient Dept.	Thursday 1-2	$15.00
INTERNAL MEDICINE			
Medical Conference	Receiving Hospital	Saturday 11-12:30	$15.00
Gastroenterology	Receiving Hospital	Saturday 8-9	$15.00
Medical X-Ray Conference	Receiving Hospital	Tuesday 11-12	$15.00
Allergy Clinic & Conference	Receiving Hospital (Minimum of 4)	Tuesday 8-11	$25.00
OBSTETRICS AND GYNECOLOGY			
Postgraduate Gynecology Ten Lectures 'Dry' Clinic	Receiving Hospital Farwell Annex, 2nd Fl.	Wednesday 2:30-4	$50.00
SURGERY			
Surgery Seminar	College of Medicine	Monday 4-5	$15.00

Comprehensive Unit Course

This class in Basic Ophthalmology will begin in September, 1953, and applications must be in immediately. Applications can be secured from the Postgraduate Department at the College of Medicine, 1512 St. Antoine, Detroit 26, Michigan.

OPHTHALMOLOGY			
Basic Ophthalmology	Kresge Eye Institute and Hospitals	Full Time (9 months)	$900.00

Norman F. Miller, M. D.

If you seek a man of illimitable variety—gentleman, physician, scientist, professor, writer, bon vivant and host *par excellence,* you should meet Dr. Norman F. Miller. He is not susceptible to the usual portraiture because he is not a usual man. Dr. Miller, Norm, "the chief" (as he is variously known by his friends, associates and staff members) has a career punctuated by such divergent and numerous achievements that the mere history of them constitutes a major project.



To begin a brief outline of his life, his early years were spent in Iron Mountain, Michigan, the place of his birth. His formal education, after a year at Beloit College in Wisconsin, was completed at the University of Michigan where he was graduated from Medical School in 1920 and where he later served his internship. Already, scholarly perception and lucidity of expression marked him with distinction. He remained at the University as an instructor in the Department of Obstetrics and Gynecology from 1920 to 1924 and as an assistant professor from 1924 to 1926.

Knowledge of his ability and potentialities spread throughout the academic sphere and he was sought by the University of Iowa. There, from 1926 to 1931, he was an associate professor of obstretrics and gynecology. In July, 1931, he returned to the University of Michigan where he assumed his present position as Professor and Chairman, Department of Obstetrics and Gynecology, succeeding his teacher, Dr. Reuben Peterson.

However, this is a cursory glance. The significant quality of Dr. Miller's character is a delicate balance between the two extremes of dynamic activity and contemplation. Intensely active and busy, he has not lost sight of the fact that it is not just the doing of things that is important but the doing of things with a goal worthy of a man's highest ability. This realization is what enables him to smile amusedly at his success and to make his zeal for knowledge not just a tool of pride but a culture medium for the maturing of altruistic projects.

Because of his dissatisfaction with anything less than best, his department has maintained its position as one of the leaders in the academic world. The contagion of his energy and his exact focus on things has made him a leader whose influence has yielded enviable results. In pace with the growth and development of this University, the Department of Obstetrics and Gynecology has expanded its research and other services under Dr. Miller's guidance.

Among the more tangible marks of progress was the construction of the new maternity hospital three years ago. Here, Dr. Miller's dreams and thoughtfully conceived plans were put into steel and brick. This building now approaches the ultimate in maternity hospitals and is often used as a standard of comparison for the construction of similar hospital units.

To attempt to reduce the range of Dr. Miller's influence as a teacher to a mathematical equation is to try the impossible. Not only have thousands of medical students profited from his teaching but also six of his former staff members are now professors and heads of their respective departments in other universities across the country. The example he sets as a man of integrity has served as a stimulus for constant striving.

A luncheon honoring Norman F. Miller. M.D., was held in the Sheraton-Cadillac Hotel, Detroit, on March 12, 1953. Over one hundred of his medical confreres and other friends and associates in cancer control work were present to congratulate Dr. Miller.

Dr. Miller has always devoted special study to gynecological cancer and has made an enviable record in the completeness of follow-up information on these cases. In recognition of this work, he recently was the recipient of a scroll presented by the Michigan State Medical Society which reads as follows:

"In grateful recognition of his contribution to cancer control by his unequaled record of follow-up information on all of the more than three thousand one hundred and fifty cases of gynecological cancer seen by him during the past twenty-two years."

It is not to be assumed that all of Dr. Miller's abilities lie in the fields of organization, teaching and personal service to patients. His mind is an elegant and creative instrument that has contributed invaluable original procedures to operative gynecology. And his published works in both obstetric and gynecologic literature are medical milestones. He has been active in many outstanding organizations. For example, he is the president of the Obstetrical and Gynecological Travel Club, past Secretary of the American Gynecological Society, a former Director of the American Board of Obstetrics and Gynecology, and Honorary member of the Edinburgh Obstetrical Society, Edinburgh, Scotland.

Despite these many activities Norman Miller has become proficient in woodworking and metal craft. Out of his complete workshop have come numerous decorative and useful objects. At present, photography is his most absorbing relaxation. His collection of pictures includes rare shots of birds and wild life. On Sunday mornings he and Pierre, his Brittany spaniel, stroll through the woods in search of likely subjects.

Besides his dominance in his profession, three attributes are arresting: the exuberant fertility of his mind, his fresh and buoyant personality, and the Jeffersonian ideal that he follows—"Error of opinion may be tolerated where reason is left to combat it."

Dr. Miller, we salute you!

Wayne University College of Medicine

Postgraduate Continuation Course

March 16-June 13, 1953

POSTGRADUATE COURSE IN EARLY DETECTION OF CANCER

Wayne University College of Medicine offers a Postgraduate Course in the early detection of cancer. Three facilities of the College are to be used throughout the year in the presentation of the course: The Yates Memorial Clinic at 4811 John R, Detroit; the Detroit Receiving Hospital; and the Veterans Administration Hospital, Dearborn. The course is scheduled so that it may be taken for all quarters or for any one quarter. The program for the third quarter only is listed here. The course is designed so that doctors of medicine may become acquainted with the means of diagnosis and with the tools of diagnosis which are readily available to them.

Third Quarter beginning March 16 and ending June 13, 1953

Wednesday—Review of Biopsies and Papanicolaou Smears	
Yates Memorial Clinic	10:30-11:30 a.m.
Wednesday—Tumor Clinic	
Detroit Receiving Hospital	12:30- 2:00 p.m.
Thursday—Cancer Clinic (Women)	
Yates Memorial Clinic	3:00- 5:00 p.m.
Friday—Consultation Clinic	
Yates Memorial Clinic	10:00-12:00 a.m.

Registration for this course should be made in the office of Postgraduate Medical Education at the College of Medicine, 1512 St. Antoine, Detroit 26. Those wishing to be enrolled for the third quarter must register before *March 14.* Tuition is $50.00 per quarter, and the class is limited to fifteen.

Annual Session of The Council

January 30-31, 1953, Detroit

HIGHLIGHTS OF THE COUNCIL

- The Auditors' Report for 1952, and the budgets for 1953, were approved. See pages 317-321.
- Annual Reports of Secretary, Treasurer, Editor were approved.
- Reports of the three Standing Committees of The Council, meetings of January 29, were presented and accepted.
- Secretary L. Fernald Foster, M.D., Bay City, Editor Wilfrid Haughey, M.D., Battle Creek, and Treasurer Wm. A. Hyland, M.D., Grand Rapids, were re-elected.
- Progress report on Michigan Medical Service was presented by R. L. Novy, M.D., Detroit, M.M.S. President.
- Progress report on Michigan Hospital Service was presented by K. B. Babcock, M.D., Detroit, M.H.S. President.
- Monthly reports of Council Chairman William Bromme, M.D., Detroit; President R. J. Hubbell, M.D., Kalamazoo; Secretary L. Fernald Foster, M.D., Bay City; Rheumatic Fever Co-ordinator Leon DeVel, M.D., Grand Rapids; Legal Counsel J. Joseph Herbert, Manistique; and Public Relations Counsel H. W. Brenneman, Lansing, were accepted.
- Annual reports of individual Councilors on condition of profession in their Districts—and on Beaumont Memorial Restoration Fund contacts—were presented.
- Mutual problems were discussed with Michigan Health Commissioner A. E. Heustis, M.D.
- Appointments: G. V. Conover, M.D., Flint, was appointed Co-Chairman of Legislative Committee; E. M. Williamson, M.D., Kalamazoo, to Mental Hygiene Committee; H. B. Elliott, M.D., Flint, to Subcommittee on Planning and Organization of Emergency Medical Service Committee; B. L. Masters, M.D., Fremont, as Chairman of the Rural Medical Service Committee; D. C. Bloemendaal, M.D., Zeeland, R. C. Dixon, M.D., Pigeon, W. B. Fillinger, M.D., Ovid and R. C. Peckham, M.D., Gaylord, all to the Rural Medical Service Committee; F. W. Hyde, Jr., M.D., Detroit, as Michigan Hospital Association representative to the Emergency Medical Service Committee.
- Progress report on Beaumont Memorial Restoration was presented by Past President Otto O. Beck, M.D., Birmingham: approximately one-third of Michigan's doctors of medicine have contributed a total of $27,113.90; an additional $12,000 to $15;000 must be secured to defray the expenses of erecting the Beaumont Memorial on Mackinac Island.
- MSMS representatives to the Conference on Aging, to be held in Ann Arbor in July, 1953, were appointed: J. S. DeTar, M.D., Milan; P. C. Gittins, M.D., Detroit, and A. H. Price, M.D., Detroit.
- E. C. Baumgarten, M.D., G. C. Penberthy, M.D., W. S. Reveno, M.D., all of Detroit, and G. W. Slagle, M.D., Battle Creek, were nominated for the Board of Trustees of Michigan Hospital Service.

- Committee reports were presented by: (a) Postgraduate Medical Education Committee, meeting of December 11; (b) Arbitration Committee on UFSGA, December 12; (c) Mental Hygiene, December 17; (d) Legislative, December 18; (e) Medical Advisory Committee to Michigan Hospital Service, January 8; (f) Rheumatic Fever Control, January 14; (g) Preventive Medicine, January 15; (h) Committee on Study of Health and Accident Insurance, January 29; (i) Beaumont Memorial Working Committee, January 29; (j) Emergency Medical Service, January 21; (k) Venereal Disease Control, January 18; (l) Committee on Study of Fees for Surgical Assistants, January 21.
- M. H. Marks, M.D., and J. H. Schlemer, M.D., Detroit, were appointed as MSMS representatives to the Joint Committee on Study of Medical Examiner Bill (a committee of the State Bar of Michigan).
- Norman F. Miller, M.D., Ann Arbor, is to be recognized for his outstanding contributions to cancer education and research at a luncheon, sponsored by the MSMS Cancer Control Committee, in Detroit on March 12. A scroll was authorized for presentation to Dr. Miller on this occasion.
- L. A. Drolett, M.D., Lansing, was appointed as MSMS representative to the Michigan State Police Drivers' Licensing Committee.
- The Michigan Foundation for Medical and Health Education Lecture, to be presented annually at the Michigan Clinical Institute, was approved; another offer of the Michigan Foundation to sponsor financially the Biddle Lecture on the occasion of the MSMS Annual Session in September was accepted with thanks.
- Progress report on Michigan Health Council presented by J. S. DeTar, M.D., Milan, President.
- The Council urged all component county medical societies to make every effort to conform their Constitutions and By-Laws so they are in agreement with those of the Michigan State Medical Society, especially re membership provisions.

SECRETARY'S ANNUAL REPORT—1952

To The Council of the MSMS:

I herewith submit the report of the Secretary for the year 1952.

Membership

The Michigan State Medical Society membership for 1952 showed a total of 5,337 members, including 256 Emeritus and Life Members, 35 Retired members and 202 Associate and Military members. The total paid membership was 4,910 with net dues of $96,725.50. The 1952 membership was at the highest peak in the history of the society. The number of members with unpaid dues for 1952 was 104.

Deaths During 1952

Allegan County—Orrin Dean Hudnutt, M.D., Plainwell.
Bay County—Frederick J. Roberts, M. D., Bay City.
Calhoun County—Frank D. Linn, M.D., Albion.
Cass County—James H. Kelsey, M.D., Cassopolis.
Genesee County—A. W. Harper, M.D., Flint; Charles H. O'Neil, M.D., Deckerville.
Houghton County—James B. Quick, M.D., Laurium; Charles C. Englehart, M.D., Houghton; Ray C. Whitmore, M.D., Hancock.
Huron County—Harrison F. Thumme, M.D., Sebewaing.
Ingham County—R. R. McCrumb, M.D., Lansing; Milton M. Rozen, M.D., Lansing; Lawrence C. Towne, M.D., Lansing.
Ionia-Montcalm County—John J. McCann, M.D., Ionia; Charles T. Pankhurst, M.D., Ionia; Harry B. Weaver, M.D., Greenville.
Jackson County—Myron V. Susskind, M.D., Jackson.
Kalamazoo County—Charles L. Bennett, M.D., Kalamazoo; Joseph P. Gilding, M.D., Vicksburg; F. A. Pratt, M.D., Kalamazoo.
Kent County—Walter G. Colvin, M.D., Grand Rapids.
Lenawee County—Isaac L. Spalding, M.D., Hudson.
Macomb County—L. K. Allen, M.D., Roseville; Herbert H. Wiley, M.D., Algonac.
Monroe County—Linus T. Brancheau, M.D., Petersburg.
North Central Counties—Andrew L. Hoenig, M.D., Cherokee, Iowa.
Oakland County—Earl J. Flick, M.D., Royal Oak; Raymond G. Tuck, M.D., Pontiac.
Saginaw County—Wilbert B. Clark, M.D., Saginaw; Rockwell M. Kempton, M.D., Saginaw.
St. Joseph County—Marion F. Parrish, M.D., Sturgis; Fred R. Reed, M.D., Three Rivers.

MEMBERSHIP RECORD—1952

COUNTY MEDICAL SOCIETY	PAID 1951	PAID 1952	SPECIAL MEMBERS EMER	LIFE	RETD	AMSLSO	DEATHS 1951	DEATHS 1952	NET MEMBERSHIP 1951	NET MEMBERSHIP 1952	1952 GAIN	1952 LOSS	UNPAID 1951	UNPAID 1952
Allegan	20	20	—	2	—	1	1	1	22	22	—	—	—	—
Alpena, Alcona, Presque Isle	22	22	—	2	—	1	—	—	25	25	—	—	—	1
Barry	12	11	—	3	—	—	—	—	15	14	—	1	—	1
Bay, Arenac, Iosco	70	70	3	4	2	1	3	1	78	79	1	—	—	—
Berrien	71	74	1	1	1	1	2	—	73	78	5	—	6	3
Branch	21	19	—	2	—	—	—	—	23	21	—	2	—	1
Calhoun	94	93	—	12	—	19	2	1	128	123	—	5	1	3
Cass	8	11	—	1	—	—	—	1	9	11	2	—	2	—
Chippewa, Mackinac	21	21	2	1	1	—	—	—	25	25	—	—	—	—
Clinton	15	16	1	—	—	—	—	—	17	17	—	—	—	—
Delta-Schoolcraft	26	23	1	1	—	—	2	—	26	25	—	1	—	1
Dickinson-Iron	20	20	—	—	—	1	—	—	21	21	—	—	2	—
Eaton	19	17	—	—	—	1	1	—	18	18	—	—	—	—
Genesee	189	206	2	19	1	2	3	2	213	228	15	—	3	2
Gogebic	21	20	—	—	—	—	—	—	21	20	—	1	—	1
Gd. Traverse, Leelanau, Benzie	37	41	—	1	3	—	—	—	41	45	4	—	—	1
Gratiot, Isabella-Clare	37	38	1	1	—	—	—	—	39	40	1	—	3	1
Hillsdale	16	15	—	3	—	—	—	—	19	18	—	1	—	1
Houghton-Baraga-Keweenaw	20	21	5	2	—	2	1	3	30	27	—	3	3	—
Huron	14	12	—	1	—	1	1	1	14	13	—	1	1	—
Ingham	174	179	1	4	6	2	3	3	183	189	6	—	2	—
Ionia-Montcalm	33	35	—	3	—	—	1	3	35	35	—	—	1	—
Jackson	100	102	5	6	—	2	2	1	112	114	2	—	—	1
Kalamazoo	135	137	5	2	3	2	2	3	146	146	—	—	1	4
Kent	287	293	7	17	2	12	5	1	314	330	16	—	2	6
Lapeer	13	14	3	—	—	—	—	—	16	17	1	—	—	—
Lenawee	38	32	2	—	—	2	1	1	42	35	—	7	—	7
Livingston	18	17	—	—	—	1	—	—	19	18	—	1	—	1
Luce	5	6	2	—	—	—	1	2	6	6	—	—	2	—
Macomb	54	54	—	1	—	—	1	—	55	55	—	—	—	2
Manistee	10	10	1	—	1	1	1	—	11	13	2	—	—	—
Marquette-Alger	38	35	1	3	—	—	1	—	41	39	—	2	—	3
Mason	11	11	—	—	—	—	—	—	11	11	—	—	1	—
Mecosta-Osceola-Lake	14	15	1	1	—	—	—	—	16	17	1	—	—	—
Menominee	17	16	1	—	—	—	1	—	17	17	—	—	—	—
Midland	23	23	—	—	1	—	—	—	24	24	—	—	1	1
Monroe	36	35	2	—	—	—	1	1	37	36	—	1	—	1
Muskegon	83	86	1	3	1	5	1	—	91	96	5	—	—	1
Newaygo	9	9	—	—	—	—	—	—	9	9	—	—	—	1
North Central	19	18	—	—	1	—	—	1	21	18	—	3	—	1
Northern Michigan	31	31	1	—	—	1	—	—	32	33	1	—	1	4
Oakland	194	219	1	8	—	1	2	2	202	227	25	—	15	5
Oceana	6	8	2	—	—	1	—	—	9	11	2	—	1	—
Ontonagon	4	3	—	—	—	—	—	—	4	3	—	1	—	1
Ottawa	38	41	1	1	—	1	—	—	41	44	3	—	—	—
Saginaw	121	125	3	6	3	2	2	2	136	137	1	—	1	2
St. Clair	53	56	1	1	2	1	1	—	57	61	4	—	2	1
St. Joseph	25	27	1	—	—	—	—	2	26	26	—	—	—	1
Sanilac	13	12	—	—	—	—	—	—	13	12	—	1	1	1
Shiawassee	21	26	1	—	—	1	—	1	23	27	4	—	—	1
Tuscola	19	18	—	2	—	—	1	1	21	19	—	2	—	—
Van Buren	22	19	3	—	1	—	2	—	24	23	—	1	—	—
Washtenaw	176	186	3	6	2	98	1	4	276	291	15	—	5	9
Wayne	2176	2227	21	49	4	39	30	35	2273	2305	32	—	27	34
Wexford-Missaukee	14	15	1	—	—	—	1	—	14	16	2	—	—	—
Honorary Members		7								7	7			
Totals	4783	4910	87	169	35	202	77	73	5214	5337	157	34	84	104

Shiawassee County—Fred A. Watts, M.D., Owosso.

Tuscola County—George Bates, M.D., Kingston.

Washtenaw County—Harold de B. Barss, M.D., Ypsilanti; John W. Kemper, M.D., Ann Arbor; Sidney L. LaFever, M.D., Ann Arbor; Frank N. Wilson, M.D., Ann Arbor.

Wayne County—Henri Belanger, M.D., River Rouge; William M. Bell, M.D., Detroit; Andrew S. Brunk, M.D., Detroit; Maria Belle Coolidge, M.D., Detroit; Fillmore S. Curry, M.D., Detroit; Egbert F. Davis, M.D., Wyandotte; Russell G. Edgar, M.D., Detroit; James A. Foote, M.D., Lincoln Park; Hugo A. Freund, M.D., Detroit; Clarence C. Gmeiner, M.D., Detroit; Samuel L. Grekin, M.D., Detroit; Hugh Harrison, M.D., Detroit; James L. Henderson, M.D., Detroit; Frank J. Hodoski, M.D., Detroit; L. G. Jentgen, M.D., Detroit; Wm. Y. Kennedy, M.D., Detroit; George L. Koessler, M.D., Detroit; Thomas B. Marsden, M.D., Detroit; Earl W. May, M.D., Highland Park; George O. McDonald, M.D., Detroit; Joseph A. McGarvah, M.D., Detroit; Fred C. Musser, M.D., Hollywood, California; Archibald E. Naylor, M.D., Detroit; Robert Johnston Palmer, M.D., Detroit; Clark C. Piper, M.D., Detroit; Walton K. Rexford, M.D., Detroit; Bernard Rose, M.D., Detroit; Oscar U. Shapiro, M.D., Detroit; Wm. Clare Skinner, M.D., Detroit; Otto T. Toepel, M.D., Detroit; Clyde R. Van Gundy, M.D., Detroit; Alfred E. Van Nest, M.D., Detroit; Colin C. Vardon, M.D., Detroit; Charles R. Walsh, M.D., Detroit; Wm. Edward Woods, M.D., Detroit.

The Journal

The following financial information relative to THE JOURNAL is found in the annual audit of MaDan and Bailey:

Income was $62,902.51 which is $1,762.51 over the tentative budget for 1952.

Expenses were $65,881.54 which is $4,741.54 over the tentative budget.

These figures indicate a net loss for the year 1952 of $2,979.03.

This is largely due to the size of THE JOURNAL in terms of pages. To break even, THE JOURNAL would require a decrease of ten or more pages per month in size.

THE JOURNAL during 1952 continued the policy of special distinctive covers to emphasize some of the major

activities of the Society, e.g., Cancer, Heart Disease, Michigan Medical Service, et cetera.

The Publication Committee and Editor have continued the practice of bringing to the Members of the MSMS matters of special interest, both scientific and economic.

Finances

An audit of the books of the Society was completed by MaDan and Bailey as of December 26, 1952. This has been submitted to the Finance Committee for study and is available to any member of the society for perusal at the Executive Offices, 606 Townsend Street, Lansing, Michigan.

A brief summary of the audit produces the following information:

Assets:	
Cash	$ 43,849.58
Accounts Receivable	12,500.23
Investments	117,344.55
Property	52,180.42
Prepaid expenses	756.98
Other Assets	139.25
Total	$226,771.01
Liabilities:	
Accounts Payable	$ 20,475.99
Unearned Income	12,228.20
Beaumont Memorial Fund	26,251.85
Reserved for Special Purposes	101,558.82
Unallocated equity	66,256.15
Total	$226,771.01

From the income and expense statement we find that the total income was $95,710.10 with total expenses of $100,377.60, indicating a net loss of $4,667.50.

The Income and Expense Summary sheets indicate that of the following items—
Equity-General Fund, Annual Session, Postgraduate Institute, THE JOURNAL, Contingent Fund, Building Fund, Beaumont Memorial, Lecture Grant, Public Education Program, Public Education Reserve, Rheumatic Fever Program—all show a gain except THE JOURNAL, Equity-General Fund, Annual Session, Public Education Fund, Rheumatic Fever Program and the Lecture Grant which is not replenished.

The net loss for the year was $8,504.69. This is partially correct inasmuch as the expense from the previous balance is indicated as a loss. The Rheumatic Fever Account indicates a loss since the income for the period 1952 did not equal the expenses for the same period. The various accounts that show losses for the Annual Session are indicated. It will be noted that $311.81 of this was 1951 expense which was paid during 1952. This would be printing charges, for instance, the reprints of the proceedings of the House of Delegates of 1951 are billed and paid in 1952. The breakdown of THE JOURNAL indicates a net loss of $2,979.03. It will be noted that most of the income items are over the budgeted amount. The apparent loss in the Public Education Fund is more than accounted for by the publication of the *Voters' Guide* and the expenses occasioned by the PR activity in the Bay City election campaign.

1952 Annual Session

The 1952 Annual Session held in Detroit in September showed a total registration of 3,605, which was a record attendance.

The General Assembly type of program with daily discussion conferences was continued as in recent years and brought to Michigan twenty-six Essayists. There were no Scientific Exhibits due to restricted physical facilities in Detroit.

The exhibit during this Annual Session was comprised of ninety-seven Technical Exhibitors in ninety-nine spaces.

The policy of bringing to the Scientific Assembly out-of-state essayists of national and international reputation was continued and no expense was spared in making the meetings as interesting and instructive as possible. In spite of the rapidly rising costs of operation a modest gross profit, before proration of salaries, accrued to the society from the Annual Session.

To the ninety-seven Technical exhibitors, the registrants showed their usual appreciation and gave them very generous attention.

1952 House of Delegates

The House of Delegates, transacted the legislative business of the society with unusual dispatch, but wholly consistent with thoughtful deliberation. Some of the highlights of the transactions of the House of Delegates were:

1. Adopted Resolutions and Motions concerning:
   (a) Resolution re Support of Keogh-Reed Bills in Congress.
   (b) Resolution re Expert Testimony.
   (c) Resolution re Migratory Laborers.
   (d) Resolution re Endorsing Work of World Medical Association.
   (e) Resolution re Report on Press Releases on AMA Public Relations.
   (f) Motion electing R. L. Novy, M.D., Detroit, as President-for-a-day.
   (g) Motion re Legislation Concerning Recalcitrant Tuberculous Patients.
   (h) Motion to appoint a House of Delegates' Committee to Study Requirements for Special Memberships.
2. Disapproved three Resolutions:
   (a) Leniency in Administration of Act 59 of P.A. 1937 (another resolution on Act 59 was referred to The Council).
   (b) AMA Welfare Fund for Needy M.D.'s.
   (c) Re Terms "session" and "Meeting" (a proposed amendment to By-Laws).
3. Referred to The Council:
   (a) Three Resolutions re Fees for Surgical Assisttants (to appoint a study committee to report to 1953 House of Delegates).
   (b) Resolution re Act 59 of P.A. 1937 (to appoint a study committee to report to 1953 House of Delegates).
   (c) Resolution re Simplified Insurance Reporting Form (to implement House of Delegates' action and arrange distribution of a simplified form).
   (d) Resolution re Repeal of Citizenship in Medical Practice Act (instruct The Council and Legislative Committee to seek legislation permitting temporary licensing of non-citizen M.D.'s in hospital training while they seek naturalization).
4. (a) Adopted amendments to Constitution:
   (1) Article X, Section 2, re Treasurer being member of Executive Committee of The Council.
   (2) Article X, new Section 3, re Vice Speaker's membership on Council and its Executive Committee.
   (b) Adopted amendments to By-Laws:
   (1) Chapter 10, Section 1, re abolishing Committee on Distribution of Medical Care.
   (2) Chapter 8, Section 4, re Special Sessions of the House of Delegates.
5. Accepted Dean Cornwell painting "Beaumont and St. Martin," presented to MSMS by Wyeth, Inc., Philadelphia.
6. Elected S. L. Loupee, M.D., Dowagiac, as Michigan's Foremost Family Physician for 1953.
7. Presented Honorary Membership Scroll to Paul de Kruif, Ph.D., Holland.
8. (a) Elected six members to Emeritus Membership.
   (b) Elected twenty-six members to Life Membership.

(c) Elected eleven members to Retired Membership.
(d) Elected fifty-eight members to Associate Membership.
(e) Elected three members to Honorary Membership.

9. Elected the following officers:
(a) Arch Walls, M.D., Detroit, as Councilor of 1st District (1956).
(b) H. B. Zemmer, M.D., Lapeer, as Councilor of 7th District (1957).
(c) L. C. Harvie, M.D., Saginaw, as Councilor of 8th District (1957).
(d) G. B. Saltonstall, M.D., Charlevoix, as Councilor of 9th District (1957).
(e) F. H. Drummond, M.D., Kawkawlin, as Councilor of 10th District (1957).
(f) W. D. Barrett, M.D., Detroit (1954); R. L. Novy, M.D., Detroit (1954); W. H. Huron, M.D., Iron Mountain (1954), as Delegates to the American Medical Association.
(g) E. D. Spalding, M.D., Detroit (1954); C. I. Owen, M.D., Detroit (1954); G. W. Slagle, M.D., Battle Creek (1954), as Alternate Delegates to the American Medical Association.
(h) L. W. Hull, M.D., Detroit, as President-Elect.
(i) R. H. Baker, M.D., Pontiac, as Speaker, House of Delegates.
(j) J. E. Livesay, M.D., Flint, as Vice Speaker, House of Delegates.

Organizational Activities

Michigan Postgraduate Clinical Institute and Heart Day

This sixth annual scientific institute held under the sponsorship of the Michigan State Medical Society in co-operation with the University of Michigan Medical School and Department of Postgraduate Medical Education, Wayne University College of Medicine, the Michigan Foundation for Medical and Health Education, Inc., and the Wayne County Medical Society was held in Detroit on March 12, 13, 14, 1952.

This institute designed to provide a high type scientific program, encourage Michigan Physicians to prepare presentations and to publicize Michigan as a medical center, this year featured twenty-nine Michigan doctors of medicine and twelve out-of-Michigan essayists on the program.

The Institute was an outstanding success as evidenced by the fact that it produced a total registration of 1,933 with physicians present from Michigan, all nearby states and Canada.

County Secretaries—Public Relations Conference

A Conference of County Secretaries and other officers and members of component county groups was held in Detroit on January 27, 1952. This all-day conference was attended by over 200 County Society Officers, County Society Public Relations Committee Chairmen, Members of the Michigan State Medical Society Council, Legislative Committee and Public Relations Committee and Officers of the Woman's Auxiliary. This conference was a spring board which catapulted the Formula for Freedom into activity throughout the state. Speakers also presented the subject of "What You Should Know about the Medical Practice Act and the Basic Science Act;" also MSMS Techniques.

Public Relations

Public Affairs: Public Relations programs of the Michigan State Medical Society moved forward during 1952 in all media—press, radio, television, motion pictures, publications—to develop a better understanding between the medical profession and the public.

Newspapers.—Advance newspaper coverage for the 1952 Michigan Clinical Institute and the 1952 Annual Session was complete. A total of 1,215 column inches of space was devoted to publicity of the Clinical Institute. The total coverage for the Annual Session was 2,124 column inches of space.

The improvement in coverage of the 1952 Annual Session was aided in part as the result of survey made of the 1951 releases. The findings of the survey will be utilized in all future advance releases for the MCI and Annual Session.

Excellent newspaper coverage was also received in special releases sent out during the year. Outstanding coverage was given such prime MSMS news as the Beaumont Memorial Restoration and Michigan's Foremost Family Physician.

Information on facilities of the Michigan State Medical Society were made available to the state and national newspaper writers requesting special information on such matters as the Formula For Freedom, the MSMS Prison-Report, and the Detroit hearing of the President's Commission on the Health Needs of the Nation, et cetera.

Radio.—"Tell Me, Doctor" five-minute radio series was discontinued on December 31, 1952, as it had served its purpose.

Total scripts written were, 1,619.

At time of closing of show, thirteen Michigan radio stations using the program were: WELL, Battle Creek; WATT, Cadillac; WATZ, Alepna; WMRP, Flint; WTVB, Coldwater; WMDM, Midland; WKZO, Kalamazoo; WIBM, Jackson; WHFB, Benton Harbor; WJBK, Detroit; WMPC, Lapeer; WFYC, Alma; and WMLN, Mount Clemens.

Organizations outside of Michigan using scripts or recordings at time of closing were: Dade County Medical Association of Florida and Oklahoma State Medical Association. Recordings and scripts of the "Tell Me, Doctor" program will be kept at MSMS in Lansing for individual release through County Medical Societies.

A total of seventeen special radio and TV appearances were arranged in Detroit during 1952 Annual Session plus a special half hour dramatic radio show, "The Strange Patient of Doctor Beaumont" which was broadcast by WWJ, Detroit.

Television.—While "It's Your Life," a half-hour video production of the Michigan State Medical Society on WJBK-TV, Detroit was concluded on May 28, 1952, the continuity of health information was not interrupted. The time was given to the Michigan Health Council which is producing a health series called "Court of Health."

"It's Your Life" began December 17, 1950. During the year and one-half of its life on the air a total of seventy-one shows were produced which utilized eighty-one different doctors of medicine plus twenty-seven lay persons.

The second MSMS television show. "Medical Mailbox" is produced each week on WXYZ-TV, Detroit. This half hour show began June 27, 1951. By the end of 1952, seventy-eight shows had been produced in which one or more Michigan doctors of medicine participated to discuss a scientific or medical socio-economic topic of general interest.

Future plans for television include a filmed series of five-minute productions on practical socio-economic and medical points of information. It is planned that the series will be made available to all Michigan TV stations and result in more complete coverage of the state in regard to television.

Motion Pictures.—The sound, color 16 mm. film "To Save Your Life," produced by MSMS in 1951 has continued to be widely distributed to service clubs, school

groups and other organizations during 1952. By the end of the year a total of ninety-two organizations and an estimated audience of 125,000 had viewed the production. Other states have been interested in the film but no "sales campaign" has been carried out. The film is also booked well into 1953. Every effort should be made by the MSMS and the Woman's Auxiliary to obtain wider distribution of this film.

The other MSMS films, "Lucky Junior" and "To Your Health" have been shown to a total audience of at least 1,000,000 persons. The films are now available as 16 mm. prints for screening to organizations.

Pamphlets and Publications.—The popular brochure on Medical Associates, "In Planning Your Career" went into its second printing. The brochure had first been printed in 1948. The 17,000 copies printed in 1948 were exhausted by the first part of 1952. The second printing was made of 10,000 copies. The brochure was also revised where necessary and brought up to date. Requests continually are received by MSMS for the brochure.

One thousand copies of "In Planning Your Career" have been placed with the Detroit Historical Society for use by the organization's Career Counselling service available to eleventh grade Detroit students.

MSMS publicity has appeared in publications of lay and medical organizations. These include THE JOURNAL of the Michigan State Medical Society, *Auxiliary News* of the Woman's Auxiliary to the Michigan State Medical Society, County Medical Society Bulletins and the *Michigan Health Council Bulletin* as well as *Medical Economics* and *The Journal of the American Medical Association.*

A monthly page in THE JOURNAL called PR Report began in the first days of 1953 to supplement other articles currently prepared by the PR Department.

Regularly scheduled releases to County Medical Society Bulletins are also being sent out monthly.

Special articles were prepared for County Bulletins in 1952.

More releases through the publications of the AMA are planned for 1953.

Adult Education.—The Adult Education program of the Michigan State Medical Society continued in operation during 1952.

A total of fourteen Michigan communities have participated in the program under the sponsorship of ten County Medical Societies.

The ten county medical societies with either current or former programs are: Bay, Genesee, Ingham, Jackson, Macomb, Marquette-Alger, Menominee, Oakland, St. Clair and Tuscola.

Exhibits.—The MSMS sponsored exhibits at the 1952 Michigan Clinical Institute, the Michigan Rural Health Conference and the Michigan State Fair.

At the Michigan State Fair a total of 90,000 pieces of medical literature were distributed.

A new exhibit is being developed by MSMS and will be available to county medical societies for use at local fairs or community events. Its first appearance will be at the Michigan Clinical Institute, 1953.

Getting Out the Vote.—Under the "Know Your Government" element of the Formula For Freedom program a campaign was waged prior to the November, 1952, election aimed at getting out the vote. The work of the Woman's Auxiliary and the Michigan State Medical Assistants Society was monumental in this task.

A "Voter's Guide" published by *Inside Michigan* magazine was widely distributed by the MSMS. A total of 40,000 copies were placed in the hands of interested citizens and was used as source material in "voters" classes throughout the State.

Committees

Limitation of time and space makes it impossible to detail in this report the activities of all the committees contributing to the many splendid programs of the State Society. The accomplishments of the committees of the Society were achieved at the expense of many hours of personal sacrifice on the part of the personnel of the various committees. During 1952 the sixty-five committees of the Michigan State Medical Society held a total of seventy-four meetings and practically every meeting was attended by your Executive Director or Secretary. A total of 509 fellow members in your State Medical Society gave freely of their time to attend these meetings and assist in the operational activities of the State Society. Too much commendation cannot be accorded the committee members who contributed their time and effort to develop and execute constructive programs—both scientific and economic—for the public welfare and to maintain the position of leadership of the Michigan State Medical Society in the field of progressive medical planning.

Legislation

Increasing attention to health matters by both the National Congress and the Michigan Legislature was very evident during the 1952 Session of those two bodies.

All legislation of primary interest to the medical profession considered by the national congress was carefully scrutinized and close liaison maintained with the American Medical Association both by way of MSMS personnel and through the increasingly effective Washington Letter of the AMA. No legislation of consequence that might jeopardize the practice of medicine was passed by the National Congress. Michigan co-operated with the President's Commission On Health Needs Of The Nation in such a way that it received only commendatory attention in the press.

During the second term of the sixty-seventh Michigan Legislature (1952 Session) 842 legislative proposals were considered of which 126 were of direct concern to the medical profession. It should be noted that this large number of bills were considered in spite of the fact that the 1952 session was supposed to be a short meeting to consider in the main bills of an emergency nature. We can only conclude that we must look forward to an annual rather than a bi-annual session of the Legislature, from now on, each of equal importance, and provide accordingly in the disposition of our legislative personnel and member interest.

During the 1952 Session, the fight to retain the high standard of medicine for the people of this state was hard and long. However, no major legislation endangering the health of the people was passed. Indeed, valuable progress was made particularly in regard to the Basic Science Act and the Medical Practice Act. The beneficial results of amendments to these two acts are already being felt and will become increasingly obvious in the next few years as the inequities of the previous laws give way to the advantages of the present law.

Rather than attempt to review all the legislation of the 1952 Session, I refer you to the Annual Report of the Legislative Committee (1951-52) in the Handbook of the House of Delegates.

In addition to the progressive work accomplished on the two acts already mentioned, it might be germane to also indicate the protective work done. In this I take pleasure in citing the activity that resulted in the refusal of the Legislature: to place a tax on Blue Cross-Blue Shield; to permit sub-standard healing arts from receiving unmerited privileges; to unduly disturb the relationship of governmental health agencies; to pass legislation tending towards socialized medicine; or to fail to carry out its financial obligations for the building of medical and hospital facilities.

However, victories in one session are past history in the next session. We are faced in 1953 with an even greater task. With the Session barely two weeks old

over 250 bills have been drafted for introduction. Many of these are dangerous to the medical profession and to the health of the people. We expect approximately 1,400 bills to be prepared for introduction. All of these must be carefully reviewed, whether introduced by friend or foe.

In 1953 we must recognize two basic truths. The first is that we must continue to take the initiative in health legislation if we are to continue to merit the complete co-operation of the legislature which we have received in the past. The second is the necessity for concerted "back home" support of the MSMS policies in respect to state and national legislation. For we would be politically naive to fail to recognize that politicians listen most closely to their enthusiastic and effective supporters in their respective home areas. In this latter respect we must also recall that perhaps less personal contact with legislators than is usual was made during the past election campaign by our members and our legislative representatives due to concentration on the state-wide problem of reapportionment and certain special local problems having state and national significance. This imposes an even greater immediate responsibility on our membership in the state at large than was heretofore the case.

Rheumatic Fever Program

This Society-sponsored program of consultation and diagnosis in the field of Rheumatic Fever demonstrates the voluntary approach in the field of preventive medicine. The Michigan Society for Crippled Children and Adults, Inc., has discontinued its financial support of this program but the Michigan Heart Association has contributed sufficient funds for the continued operation of the program, this year having contributed $15,750.00.

We must emphasize that the Rheumatic Fever program is a voluntary effort of the medical profession of this State, aided financially by other voluntary groups, to demonstrate its ability to conduct successful programs in the field of Public Health; that it is an educational effort both for physicians and the public; that it is being viewed with interest and sometimes envy by other groups and agencies; and that if it fails for lack of support by the individual physicians and county medical societies of the state the medical profession will be open to ridicule and further attempts to bring into the doctors' control the remaining modern procedures of medical practice—(vi., Rheumatism, Arthritis, Cerebral Palsy, Epilepsy, et al) will be impossible. During 1952 considerable progress has been made toward expanding this program and there are now operating or in the process of development over thirty centers in the state.

Contacts With Governmental Agencies

During 1952 your Society maintained active and friendly contacts with many governmental agencies at local county, state and national levels. Included in these contacts were:

The Governor of Michigan
The Michigan Crippled Children Commission
The State Board of Registration in Michigan
Michigan Civil Service Commission
Michigan's Attorney General
The State Department of Public Instruction
The University of Michigan
The Michigan State College
Wayne University
Michigan Social Welfare Commission
The U. S. Senators and Congressmen from Michigan
The State Health Commissioner
National Emergency Medical Service
The Michigan Mental Health Commission
Procurement and Assignment

Contacts With Non-Governmental Agencies

During 1952 the usual active contacts were maintained with many non-governmental agencies—especially

Michigan Medical Service
Michigan Hospital Service
Michigan Health Council
The State Tuberculosis Association
The Michigan Foundation for Medical and Health Education
The Michigan Heart Association
The Rural Health Conference and its ninety-eight other groups
The National Foundation for Infantile Paralysis
American Cancer Society
American Red Cross
National Conference on Medical Service
Conference of Presidents and other Officers of State Medical Associations
Associated Postgraduate Committee and numerous other groups

Society Activities

Many contacts were made during the year with members of the Society at Councilor District Meetings and County Society Meetings. These contacts were made by various members of the administrative personnel and were designed to publicize the various activities of the State Society and to allow a discussion of any question propounded by the members present. These meetings developed a critical discussion of the problems of the local and State organizations, problems of the public relations, the "dispractices" of medicine and other subjects bearing upon the development and maintenance of activities necessary to the establishment of medical practice on its deserving high plane, especially the Public Relations Program of The Formula For Freedom. Your Secretary personally visited forty-four of the fifty-five County and District medical societies and attended 110 meetings during the year. The Officer Personnel attended many medical meetings and were invited to speak before many other organizations in and out of the state. Their presentations before lay and civic organizations during the past twelve months, totaled scores of appearances, with messages beamed to the theme that voluntary medicine has achieved the best results for the people's benefit and is to be preferred to a compulsory federally operated type of political foreign medicine.

Especially to be commended are the high quality scientific postgraduate "clinic days" being offered by county and district medical societies annually including: Calhoun, Grand Traverse, Genesee, Ingham, Jackson, Kent, St. Clair, and Wayne Counties and by the Upper Peninsula Medical Society.

Secretary's Letters

As part of the Society's general educational program for individual members and component County Societies there were issued during the year 1952, seven Secretary's Letters, four to county secretaries and keymen and three to all members of the Michigan State Medical Society. These informational circulars were in addition to the monthly issues of The Journal with its scientific articles and informative news items.

Office Personnel

During 1952 the Executive Office Personnel has discharged its many duties with extra loyalty and untiring effort.

The new Executive office building enables the society to better house its personnel and contributes to greater efficiency of operation of the affairs of the society.

Foremost Family Physician Award

The fifth annual "Foremost Family Physician Award" was accorded S. L. Loupee, M.D., Dowagiac, Michigan. The award will be officially made in March, 1953, on the occasion of the Michigan Postgraduate Clinical Institute.

Recommendations

As a result of a careful analysis of the Society's activities, the prospective economic conditions and the attitude of the public toward medical organizations, I respectfully submit the following recommendations for your consideration: That

1. The Council recommend to every county medical society that it set up a program of indoctrination of new members.
2. The Council make a survey of doctor-emergency call services in Michigan, to the end that every area in Michigan has a plan of supplying medical service particularly on nights, Sundays, and Holidays.
3. That The Council urge county medical societies to put into operation at the earliest possible moment the Public Meeting plan in which the local Councilor's help is available.
4. The Council instruct the County Societies to deduct their 1 per cent collection costs for the AMA and MSMS dues and remit to the Executive Office $69.30 instead of $70.00

Your Secretary desires to express to the members of The Council his sincere appreciation for their fine personal and collective co-operation and the encouragement they have accorded him during 1952.

To the Executive Office personnel, to Mr. H. W. Brenneman, Public Relations Counsel, and assistant counsel, Mr. Jack Kantner; Mr. J. Joseph Herbert, Legal Counsel; Dr. Wilfrid Haughey, Editor; and Mr. Robert Roney, Assistant Executive Director. Your Secretary is particularly grateful for their loyalty, willing application to their many tasks and many constructive suggestions. To Executive Director Mr. Wm. J. Burns, I wish to express a special appreciation for his wise counsel, helpful co-operation, and inspiration.

To all those who have aided so generously in the discharge of the duties of his office, your Secretary is most grateful.

Respectfully submitted,
L. Fernald Foster, M.D.
Secretary

EDITOR'S ANNUAL REPORT—1952

With the close of the year 1952, The Journal has completed 616 issues in fifty-one years. The first Journal was published in September, 1901, making four issues that year. This is an unbroken record of accomplishment of which the Society is and can be justly proud. During all these years the primary effort has been to make The Journal a worthwhile scientific medium, but also a strict and convenient "house organ" to carry to the members and the organizations of the profession news and comments on the sociologic and economic interests of the combined group.

It has ever been the program of the editor and his advisers, especially the Publication Committee and the Council, to report through the pages of The Journal the considered and consistent leadership outlined and sponsored by the many persons and committees working in the interests of the Society. The Journal has been a constant medium of communication and expression. Its pages have always been open to the elected and appointed officials whose duties are to carry on the functions of the Society, and to any member who has an idea which he chooses to transmit through the editorial pages, and letters to the membership.

During the year 1952, we published original papers from 161 different authors, ten of whom appeared twice and one three times. An idea of the versatility of papers and authors is thus given by the wide distribution of author names, and the few repeats. There were seventy-nine "In Memoriam" notices, seventy-five book reviews, and thirty-one items on military medicine. The editor prepared and published fifty-five editorials, and used forty editorial comments gleaned from other publications. The fact that our members do take advantage of the chance to express themselves is proven by the thirty-five Communications published in that department.

During the year we have continued our plan of making our covers distinctive and representative of the interests and objectives of the Society. No two covers were alike, and that holds for several years. We are proud of the work accomplished in designing these covers. We have again been offered a fancy price for this cover page by an advertiser, but have believed the reader interest in our "appearance" far outweighed the dollars we could have obtained by making our covers an advertisement, and exact duplicates of fifteen or twenty of our contemporary Journals. The size of the Journal, 1,654 pages, not counting the covers, has remained about equal for several years. We are happy to report a successful year—recording the work of the Michigan State Medical Society and its accomplishments.

Respectfully submitted,
Wilfrid Haughey, M.D., *Editor*

TREASURER'S ANNUAL REPORT—1952

The present cash account (bond dividends) of the Michigan State Medical Society in the Michigan National Bank in Grand Rapids is $2,866.61.

This is a total of the result of the transfer of $2,123.50 from the Detroit Bank in April, 1952, and the deposit of $610.00 and $133.11 of interest on the bonds; the latter two items were collected in 1952, and deposited in January of 1953, after the bonds were officially transferred from the Detroit Bank to the Michigan National Bank, Grand Rapids office in 1952, and to me on January 6, 1953. The bonds are in lock box 121, Michigan National Bank, Grand Rapids.

A résumé of the bonds follows:

$8,000 U. S. Treasury Bonds 2¾ per cent Investment Series B-1975-80 dated April 1, 1951, due April 1, 1980-75 Nos. 17469K/76F reg. n/o Michigan State Medical Society.
$15,000 U. S. Treasury 1½ per cent Notes Series A-1955 dated Mar. 15, 1950, due Mar. 15, 1955 with Sept. 15, 1952 and s.c.a. No. 52486 for $10,000 and No. 10112 for $5,000.
$3,000 U. S. Treasury 1⅜ per cent Notes Series A-1954 dated Dec. 15, 1949, due Mar. 15, 1954 with Sept. 15, 1952 and s.c.a. Nos. 30704/6.
$5,000 United States Savings Bonds—Series G Dated May 1, 1946, Nos. M4 733 323G/7G reg. n/o The Michigan State Medical Society, Fifth Floor, Metz Building, Grand Rapids, Michigan.
$30,000 United States Savings Bonds—Series G dated Aug. 1, 1946, Nos. V543 383G/8G reg. n/o The Michigan State Medical Society, 2020 Olds Tower, Lansing, Michigan.
$5,000 United States Savings Bonds—Series G dated Mar. 1, 1948, No. V799 030G reg. n/o Michigan State Medical Society, c/o The Detroit Bank, Safekeeping Dept., Detroit 31, Michigan.

Cash Balance		
Cash transferred from Detroit Bank, April, 1952		$2,213.50
Interest on bonds for 1952. Deposited January, 1953		
	1.	610.00
	2.	133.11
TOTAL BANK BALANCE		$2,866.61

Respectfully submitted,
William A. Hyland, M.D.
Treasurer

REPORT OF MADAN AND BAILEY, C.P.A.

The Council, Michigan State Medical Society,
Lansing, Michigan

Gentlemen:

In accordance with our engagement, we have examined the books and records of the Michigan State Medical Society, Lansing, Michigan, for the period December 24, 1951, to December 26, 1952, and we present herewith our report of examination.

Your attention is directed to the following comments respecting some of the more important items which came to our attention during the examination.

The Michigan State Medical Society was organized on September 17, 1910, under the laws of the State of Michigan, as a non-profit corporation. The charter has been extended for a period of thirty years from September 17, 1940. The Society is affiliated with the

American Medical Association, and it charters county medical societies within the State of Michigan. The purposes of the Society are the promotion of the science and art of medicine, the protection of the public health, and the betterment of the medical profession. In the furtherance of these purposes, the Society publishes THE JOURNAL of the Michigan State Medical Society.

The bank account maintained at the Michigan National Bank, Lansing, Michigan, was reconciled by us and further confirmed by direct correspondence with the depository. The Treasurer's account was confirmed by direct correspondence with the Michigan National Bank, Grand Rapids, Michigan. Office cash was counted by our representative, and found to be in agreement with the ledger account.

Accounts Receivable were confirmed by direct correspondence with the debtors. To date of this report, some confirmations are still outstanding. All differences will be reported to your office for further verification. The aging of the accounts by month of charge is as follows:

October, November and December, 1952	$11,653.51	
July, August and September, 1952	352.16	
January to June (credit: $27.55; $10.00) 1952	17.55	(credit)
TOTAL	$11,988.12	

The credit balance is an item in the Henry Ford Hospital account which is being checked in your office.

Accrued Interest Receivable on Bonds held by the Treasurer is computed as follows:

$ 5,000 "G" Bonds, May & Nov. 1 Interest Due (1 Year)	$125.00
5,000 "G" Bonds, Sept. 1 Interest Due (6 Months)	62.50
15,000 Treasury Notes, 1.5 per cent, Sept. 15 Interest Due (6 Months)	112.50
3,000 Treasury Notes, 1⅜ per cent, Sept. 15 Interest Due (6 Months)	20.61
8,000 Treasury Bonds, 2¾ per cent, Oct. 1 Interest Due (6 Months)	110.00
30,000 "G" Bonds, Aug. 1 Interest Due (6 Months)	375.00
TOTAL	$805.61

The Treasurer's account was transferred from Detroit to Grand Rapids on April 14, 1952. As a part of our confirmation from the Michigan National Bank, Grand Rapids, Michigan, we were advised that $610.00 in interest was deposited to the Treasurer's account on January 6, 1953. This leaves a balance of $195.61 still outstanding, which may or may not be all the September items listed above. In the absence of a Treasurer's report covering the transactions during the year, we have increased the bank account by $680.64 as confirmed to us, and we have accrued the interest as set forth above ($805.61), which with the reference to Schedule 8, exactly equals the interest of $1,486.25 that should have been received by the Treasurer during 1952.

U. S. Government Securities owned at December 26, 1952, together with details of purchases and sales during the year, are set forth in Schedule 8. The $25,000.00 U. S. Treasury Bonds 2 per cent of 6-15-54/52 are in safekeeping with the First National Bank of Chicago, Illinois, Receipt No. A-49397. The remaining bonds are in a safety deposit box, No. C121, at the Michigan National Bank, Grand Rapids, Michigan, as per confirmation from the bank. We did not count any of the securities.

The Minutes authorized the transfer of The Beaumont Memorial Restoration Fund to a separate bank account, and this was done during the year. When the transfer was made, the "Beaumont" account was kept independently from the general records. It would be better accounting practice to carry this account in the general ledger of the Society so that any changes in the fund will be recorded in the general course of your other accounting operations rather than resorting to two separate sources. We have incorporated the necessary entry in our adjusting entries to place this account on your general ledger as at December 26, 1952. Bonds of the "Beaumont Fund" are in safekeeping at the First National Bank of Chicago, Illinois, Receipt No. A-49051, a copy of which was shown our representative.

Your attention is directed to a letter, under separate cover, in regard to your Land and Office Building.

Lighting fixtures and the furnace were set up as assets to be depreciated over a fifteen-year period.

During the period under review, the Society received $117,875.00 in collections of assessments levied by the American Medical Association on its members. All such collections were paid to the American Medical Association, and this amount is not reflected in the Society's financial statements.

Membership dues received during the year were reconciled to the 5,067 membership cards issued. We have discussed with your Mr. Roney the desirability of a better system of internal control for recording the various classes of membership cards.

Sales of booth space at the Annual Session and the Michigan Clinical Institute were traced to the income accounts in the general ledger.

Changes in the various reserves for special purposes and in unallocated equity are set forth in Exhibit "C," as is the summary of all Society activities during the year. An overall loss of $8,504.69, exclusive of the "Beaumont" transactions resulted during the period under examination.

Respectfully submitted,
MADAN AND BAILEY,
Certified Public Accountant

STATEMENT OF ASSETS, LIABILITIES AND EQUITIES

December 26, 1952

ASSETS

Cash on Hand and in Banks:			
Michigan National Bank, Lansing, Mich.		$41,689.46	
Michigan National Bank, Grand Rapids, Michigan (Treasurer's Account)		2,123.51	
Office Cash		36.61	$ 43,849.58
Accounts Receivable:			
Booth Space at 1953 Michigan Clinical Institute		$ 8,080.00	
Advertising and Other Items		3,908.12	
		$11,988.12	
Less: Allowance for Doubtful Accounts		293.50	11,694.62
Accrued Interest Receivable on Bonds Held by Treasurer			805.61
Investments:			
U. S. Government Securities (Schedule 8) (Note 1) (Market or Redemption Price—$89,007.18)		$91,092.70	
Beaumont Memorial Restoration Fund:			
Michigan National Bank, Lansing, Michigan	$ 6,308.10		
U. S. Treasury Bonds, 2 per cent, 6-15-54/52 (Face Value $20,000) at cost	19,943.75	26,251.85	117,344.55
Property:			
Office Building and Land, Lansing, Michigan	$44,500.00		
Less: Depreciation Allowance	1,900.00	$42,600.00	
Lot Adjoining Office Building		6,000.00	
Building Equipment and Fixtures	$ 3,836.09		
Less: Depreciation Allowance	255.67	3,580.42	52,180.42
Prepaid Expenses:			
Expenses of 1953 Michigan Clinical Institute		$ 506.98	
Advances for Meeting subsequent to 12-26-52		250.00	756.98
Other Assets:			
Furniture and Fixtures for Resale			139.25
TOTAL ASSETS			$226,771.01

LIABILITIES

Accounts Payable:		
Federal Unemployment Taxes	$ 170.44	
Michigan Unemployment Taxes	39.75	
Withholding and Social Security Taxes	5.50	
Current Expenses	14,602.98	
Due County Societies on 1 per cent Collection Expense	2,769.20	
Refunds Due Counties on American Medical Association Dues	2,333.10	$ 19,920.97
Provision for Retroactive Salary Adjustment		555.02
Unearned Income:		
Booth Space at 1953 Michigan Clinical Institute	$11,740.00	
Advertising for 1953	488.20	12,228.20
Funded Liability:		
Beaumont Memorial Restoration Fund (Schedule 7)		26,251.85
Society Equities:		
Reserved for Special Purposes:		
Public Education Reserve	$30,000.00	
Public Education Program	30,482.34	$ 60,482.34
Rheumatic Fever Control Program		15,863.57
Lecture Grant		200.00
Contingent Fund		14,369.09
Building Fund		10,643.82
		$101,558.82
Unallocated Equity 12-24-51	$70,923.65	
Net Loss for the period	4,667.50	66,256.15
		167,814.97
TOTAL LIABILITIES AND EQUITIES		$226,771.01

STATEMENT OF INCOME AND EXPENSE

December 24, 1951, to December 26, 1952

Income:		
Membership Fees	$96,725.50	
Miscellaneous	198.61	
Interest Income	2,015.49	$ 98,939.60
Other Income:		
Annual Session (Schedule 2)	$ 1,059.19*	
Michigan Clinical Institute (Schedule 2)	808.72	
THE JOURNAL (Schedule 3)	2,979.03*	3,229.50*
TOTAL INCOME		$ 95,710.10
Expenses:		
Administrative and General (Schedule 1)	$45,019.21	
Society Activity (Schedule 1)	25,287.23	
Committee Expenses (Schedule 1)	23,973.54	$94,279.98
Loss on Sale of Bonds		100.00
1 per cent Dues Collection Expense		3,341.79
Beaumont Memorial Expenses Underwritten by the Society		2,655.83
		100,377.60
NET LOSS		$ 4,667.50*

*=Loss

EXPENSES

December 24, 1951 to December 26, 1952

Administrative and General:	
Printing and Mailing	$ 672.33
Office Supplies	2,005.23
Postage and Express	2,781.60
Insurance and Fidelity Bonds	4,226.25
Auditing	354.59
Salaries—Administrative	8,699.76
Salaries—General Office	13,072.54
General Counsel Retainer	3,960.00
General Counsel Expenses	270.07
Equipment and Repairs	3,078.31
Telephone and Telegraph	3,056.72
Payroll Taxes	1,280.11
Miscellaneous Expenses (Donations of $375.00)	1,261.70
Secretary's Office Expense	300.00
TOTAL ADMINISTRATIVE AND GENERAL	$45,019.21
Society Activity:	
Council Expense	$12,303.04
Delegates to American Medical Association	3,792.55
General Society Travel and Entertainment	4,927.65
Secretary's Letters	895.02
Woman's Auxiliary	1,481.47
Officers' Travel	1,887.50
TOTAL SOCIETY ACTIVITY	$25,287.23
Committee Expenses:	
Legislative Committee	$ 3,443.56
Postgraduate Medical Education	2,860.69
Preventive Medicine	95.20
Cancer Control	4,588.40
Child Welfare	124.75
Geriatrics	345.92
Industrial Health and Industrial Health Day	249.04
Maternal Health	484.65
Mental Hygiene	321.79
Venereal Disease Control	19.88
Tuberculosis Control	208.69
Michigan Health Council	10,000.00
Emergency Medical Service	404.20
Committee of House of Delegates and of the Council; Procurement and Assignment; Beaumont Restoration; Courses on Medical Economics; and Miscellaneous Committees	826.77
TOTAL COMMITTEE EXPENSES	$23,973.54
TOTAL EXPENSES	$94,279.98

INCOME AND EXPENSE SUMMARY

December 24, 1951, to December 26, 1952

	Balance 12-24-51	Income for the Period	Expenses for the Period	Net Gain or *Loss**	Balance 12-26-52
Equity—General Fund	$ 70,923.65	$ 98,939.60	$100,377.60	$ 1,438.00*	
Annual Session		20,400.00	21,459.19	1,059.19*	$ 66,256.15
Michigan Clinical Institute		11,590.00	10,781.28	808.72	
THE JOURNAL		62,902.51	65,881.54	2,979.03*	
Contingent Fund	7,117.81	7,251.28	0	7,251.28	14,369.09
Building Fund	9,490.42	9,668.49	8,515.09	1,153.40	10,643.82
Beaumont Memorial Fund*	4,000.00	22,255.10	3.25	22,251.85	26,251.85
Lecture Grant	300.00	0	100.00	100.00	200.00
Public Education Program	32,055.98	97,023.40	98,597.04	1,573.64*	30,482.34
Public Education Reserve	30,000.00	0	0	0	30,000.00
Rheumatic Fever Control Program	26,431.80	15,750.00	26,318.23	10,568.23*	15,863.57
TOTALS	$180,319.66	$345,780.38	$332,033.22	$ 13,747.16	$194,066.82
Less: Applicable to Funded Liability	4,000.00	22,255.10	3.25	22,251.85	26,251.85
TOTAL OTHER THAN FUNDED PORTION	$176,319.66	$323,525.28	$332,029.97	$ 8,504.69*	$167,814.97

INCOME AND EXPENSE
December 24, 1951 to December 26, 1952

ANNUAL SESSION

Scientific Meeting	$ 3,636.18
Registration	302.49
Exhibit Expense	3,579.20
Hotel Expense (MSMS Staff)	630.13
Officers Night	728.80
State Society Night	2,780.92
Printing, Mailing and Postage	2,142.45
Press Expense	1,294.83
Committee on Scientific Work	182.79
Salaries	4,316.46
House of Delegates Expense	903.92
Miscellaneous Expense	649.21
1951 Expenses	311.81
TOTAL ANNUAL SESSION EXPENSE	$21,459.19
Less: Income from Booth Sales	20,400.00
LOSS ON ANNUAL SESSION	$ 1,059.19

MICHIGAN CLINICAL INSTITUTE

Scientific Meeting	$ 1,972.40
Committee Meetings M. C. I.	177.62
Printing, Mailing and Postage	1,766.52
Exhibit Expense	2,878.94
Press Expense	809.06
Registration	187.45
Hotel Expense and Entertainment	470.25
Salaries	2,116.35
Miscellaneous Expense	385.00
Telephone and Telegraph	17.69
TOTAL MICHIGAN CLINICAL INSTITUTE EXPENSE	$10,781.28
Less: Income from Booth Sales	11,590.00
GAIN ON MICHIGAN CLINICAL INSTITUTE	$ 808.72

THE JOURNAL
December 24, 1951 to December 26, 1952

Income:	
Subscriptions from Members	$ 7,252.98
Subscriptions—Others	614.85
Advertising Sales	50,146.07
Reprint and Cut Sales	4,057.71
Cash Discounts Received and Miscellaneous	830.90
TOTAL INCOME	$62,902.51
Expenses:	
Editor's Expense	$ 2,400.00
Printing and Mailing	38,703.92
Reprint and Cut Expense	2,956.29
Salaries	10,289.91
Discount and Commissions on Advertising Sales	11,250.50
Miscellaneous Journal Expense	34.70
Cash Discounts Allowed	222.86
Telephone and Telegraph	23.36
TOTAL EXPENSES	$65,881.54
NET LOSS ON "The Journal"	$ 2,979.03

PUBLIC EDUCATION PROGRAM
December 24, 1951 to December 26, 1952

Income:	
Income from Memberships	$96,705.00
Miscellaneous Income	318.40
	$97,023.40
Expenses:	
Clipping Service	$ 107.65
Committee Meetings	763.34
Equipment and Repairs	44.71
Postage and Mailing	2,346.65
Printing	3,945.53
Office Supplies	1,200.53
Rent to Wayne County Medical Society	240.00
Salaries	41,250.68
Telephone and Telegraph	2,497.46
Travel and Entertainment	9,225.90
Cinema	744.26
Display Advertising	823.87
Newspapers	57.83
Publications and Pamphlets	3,991.56
Radio—"Tell Me, Doctor"	21,898.94
National Meeting Expense	2,007.08
County Secretary's—P.R. Conf.	2,283.14
Miscellaneous Expense	362.52
Woman's Auxiliary	149.25
County Society Meetings and Expenses	1,534.64
Rural Health Conference	433.72
Television and Radio	2,687.78
TOTAL EXPENSES	$98,597.04
EXCESS EXPENSE OVER INCOME	$ 1,573.64

RHEUMATIC FEVER CONTROL PROGRAM
December 24, 1951 to December 26, 1952

Income:		
Grant from Michigan Heart Association		$15,750.00
TOTAL INCOME		$15,750.00
Expenses:		
Central Office:		
Committee Meetings		$ 1,097.19
Equipment and Repairs		1,697.06
Payroll Taxes		231.24
Postage and Miscellaneous		29.90
Printing and Mailing		1,851.54
Administrative Salaries		8,800.00
Office Salaries		633.69
Travel		1,396.70
Miscellaneous—Telephone and Telegraph		170.66
Fellowships		2,000.00
TOTAL CENTRAL OFFICE EXPENSES		$17,907.98
Control Centers:		
Alpena		$ 200.00
Ann Arbor		500.00
Bay City		660.00
Detroit		1,153.55
Grand Rapids and Muskegon		3,214.82
Kalamazoo		981.85
Lansing		77.98
Pontiac		25.10
Sault Ste. Marie		222.90
Traverse City		1,089.00
Berrien County		249.50
Northern Michigan		35.55
TOTAL CONTROL CENTER EXPENSES		$ 8,410.25
TOTAL EXPENSES		$26,318.23
INCREASE OR DECREASE*		$10,568.23*

BUILDING MAINTENANCE FUND
December 24, 1951 to December 26, 1952

Income:		
1952 Allocation of Dues		$ 9,613.49
Prior Years Income Received in 1952		55.00
TOTAL INCOME 1952		$ 9,668.49
Expenses:		
Lighting (Note Below)		$ 0
Decorating		1,400.50
Heating and Hot Water		586.43
Lighting		316.27
Water		36.84
Salary of Janitor		2,600.00
Janitor's Supplies		136.31
Taxes		620.60
Miscellaneous Expense		403.29
General Repairs		908.18
Depreciation—Building	$1,000.00	
Equipment	255.67	
		1,255.67
Window Cleaning		251.00
TOTAL EXPENSES		$ 8,515.09
INCREASE OR DECREASE DURING YEAR		$ 1,153.40
1951 Balance in Fund		9,490.42
FUND BALANCE		$10,643.82

Note: Lighting Fixtures and new Furnace were set up as Assets.

BEAUMONT MEMORIAL RESTORATION FUND
December 24, 1951 to December 26, 1952

Fund Balance—December 24, 1951		$ 4,000.00
Income:		
Contributions	$22,232.15	
Interest on U. S. Treasury Bonds	$200.00	
Less: Accrued Interest Paid on Purchase	177.05	22.95
TOTAL INCOME		$22,255.10
Expense:		
Cost of Printing Checks	3.25	
NET INCREASE IN FUND DURING YEAR		$22,251.85
Fund Balance—December 26, 1952		$26,251.85
Analysis of Fund:		
Cash in Michigan National Bank, Lansing, Michigan		$ 6,308.10
U. S. Treasury Bonds, 2 per cent 6-15-54/52 Face Value $20,000.00 In Safekeeping with the First National Bank of Chicago, Illinois—At Cost		19,943.75
TOTAL		$26,251.85

MICHIGAN STATE MEDICAL SOCIETY
1953 BUDGET ESTIMATES

GENERAL FUND

Income:		
4,800 members @ $45.00		$216,000.00
Less:		
Allocation to THE JOURNAL @ $1.50	7,200.00	
Allocation to Public Education @ $20.00	96,000.00	
Allocation to Contingent Fund @ $1.50	7,200.00	
Allocation to Building Fund @ $2.00	9,600.00	
Balance to General Fund @ $20.00		$ 96,000.00
Interest Income	1,800.00	
Miscellaneous Income	200.00	
TOTAL FUNDS AVAILABLE		$ 98,000.00
Expenses:		
Administrative and General:		
Printing and Mailing	$ 500.00	
Office Supplies	2,000.00	
Postage and Express Charges	2,100.00	
Insurance and Fidelity Bonds	4,300.00	
Auditing	550.00	
Salaries—Administrative	8,700.00	
Salaries—General Office	19,104.39	
General Counsel Retainer	3,960.00	
General Counsel Expense	350.00	
Equipment and Repairs	1,800.00	
Telephone and Telegraph Charges	3,000.00	
Payroll Taxes	1,300.00	
Misc. Expense (Inc. Loss on Bond Sale)	500.00	
Secretary's Office Expense	300.00	
Total Administrative and General Expense		$ 48,464.39
Society Activity:		
Council Expense	$ 11,000.00	
Delegates and Alternates to AMA	4,000.00	
General Society Travel and Entertainment	4,500.00	
Officers Travel	1,800.00	
Secretary's Letters	900.00	
Woman's Auxiliary	600.00	
Dues Collection Expense	2,160.00	
Total Society Activity Expenses		$ 24,960.00
Committee Expenses:		
Legislative	$ 3,200.00	
Postgraduate Medical Education	3,000.00	
Preventive Medicine	100.00	
Cancer Control	4,000.00	
Child Welfare	100.00	
Geriatrics	400.00	
Industrial Health and Industrial Health Day ($225.00 for subcommittee)	250.00	
Maternal Health	500.00	
Mental Hygiene	400.00	
Scientific Radio	50.00	
Venereal Disease	150.00	
Tuberculosis Control	200.00	
Michigan Health Council	10,000.00	
Rural Medical Service	100.00	
Emergency Medical Service	400.00	
Procurement and Assignment	100.00	
Beaumont Restoration	500.00	
Permanent Conference Committee	350.00	
Sundry Committee Expense	775.61	
Total Committee Expense		24,575.61
TOTAL GENERAL SOCIETY EXPENSES		$ 98,000.00
GAIN OR LOSS FOR THE YEAR		$ 0
BALANCE FROM 1952		$ 66,256.15
		$ 66,256.15
NET GAIN OR LOSS ON ANNUAL SESSION, MCI, *THE JOURNAL*		$ 1,580.00
BALANCE TO 1954		$ 67,836.15

BUILDING MAINTENANCE FUND

Income:		
Allocation of Dues		$ 9,600.00
Total Funds Available		$ 9,600.00
Expenses:		
Decorating—(Exterior 1953)	$ 4,000.00	
Parking Lot	2,000.00	
Heating and Hot Water	600.00	
Lighting	325.00	
Water	40.00	
Salary of Janitor	2,836.69	
Janitor's Supplies	150.00	
Taxes	625.00	
Fire Insurance	500.00	
General Repairs	500.00	
Depreciation	1,250.00	
Window Cleaning	250.00	
Miscellaneous Expenses	150.00	
TOTAL EXPENSES		$ 13,226.69
LOSS FOR YEAR		3,626.69
BALANCE FROM PRIOR YEARS		10,643.82
BALANCE TO 1954		$ 7,017.13

ANNUAL SESSION—1953

Income:		
Booth Sales (127 spaces)		$ 22,500.00
Expenses:		
Scientific Meeting Expense	$ 3,850.00	
Registration	400.00	
Exhibit Expense	3,450.00	
Hotel Expense (MSMS Staff)	600.00	
Officer's Night and Biddle Lecture	600.00	
State Society Night	2,800.00	
Printing, Mailing, and Postage (Incl. MSMAS Program)	2,600.00	
Press Expense	1,000.00	
Scientific Work Committee	200.00	
Salaries	4,390.00	
House of Delegates Expense	1,000.00	
Telephone and Telegraph	600.00	
Miscellaneous Expense	700.00	
TOTAL EXPENSE		$ 22,190.00
GAIN ON ANNUAL SESSION		$ 310.00

MICHIGAN CLINICAL INSTITUTE—1953

Income:		
Booth Sales (74 spaces)		$ 12,190.00
Expenses:		
Scientific Meeting Expense	$ 2,000.00	
Registration	200.00	
Exhibit Expense	3,000.00	
Hotel Expense (Including Entertainment)	700.00	
Printing, Mailing and Postage	1,800.00	
Press Expense	750.00	
Salaries	2,190.00	
Telephone and Telegraph	50.00	
MCI Committee Meetings	200.00	
Miscellaneous Expense	300.00	
TOTAL EXPENSES		$ 11,190.00
GAIN ON MCI		1,000.00

THE JOURNAL—1953

Income:		
Allocation from dues		$ 7,200.00
Subscriptions of others		600.00
Advertising Sales		50,000.00
Reprint and Cut Sales		4,100.00
Miscellaneous Income (Discounts Taken)		800.00
TOTAL FUNDS AVAILABLE		$ 62,700.00
Expenses:		
Editor's Expense	$ 2,400.00	
Printing, Mailing and Postage	36,000.00	
Reprint and Cut Expense	3,000.00	
Salaries	9,750.00	
Discount and Commission on Advertising Sales	11,000.00	
Miscellaneous Journal Expense	50.00	
Cash Discounts Allowed	200.00	
Telephone and Telegraph	30.00	
TOTAL EXPENSES		$ 62,430.00
GAIN ON *THE JOURNAL*		$ 270.00

PUBLIC EDUCATION PROGRAM—1953

Income:		
Allocation from dues		$ 96,000.00
Other income (sale of films, pamphlets and "Tell Me, Doctor" programs)		300.00
TOTAL INCOME		$ 96,300.00
Expenses:		
Clipping Service	$ 200.00	
Committee Meetings	900.00	
Equipment and Repairs	500.00	
Postage and Mailing	2,500.00	
Printing	1,000.00	
Office Supplies	1,000.00	
Rent to Wayne County Medical Society	600.00	
Salaries	40,125.25	
Telephone and Telegraph	2,500.00	
Travel and Entertainment	7,500.00	
Cinema	4,000.00	
Display Advertising	1,500.00	
Newspapers	500.00	
Publications and Pamphlets (Purchased)	3,000.00	

Radio—("Tell Me, Doctor" 1951, 1952)	1,000.00
National Meeting Expense	2,000.00
Public Relations Conference	2,000.00
County Society Meetings	1,000.00
Woman's Auxiliary	1,000.00
Miscellaneous Expense	500.00
Rural Health Conference	500.00
TV and Radio Programs	5,000.00
Field Secretary's Office Expenses and Meetings	1,000.00
TOTAL EXPENSES	$ 78,825.25
GAIN FOR THE YEAR	$ 17,474.75
Balance from Prior Years	$ 30,482.34
Balance to Next Year	$ 47,957.09
Balance in P. E. Reserve (Bonds)	$ 30,000.00

RHEUMATIC FEVER CONTROL—1953

Income:	
Michigan Heart Association	$ 21,903.68
TOTAL INCOME	$ 21,903.68
Expenses:	
Central Office Expense:	
Committee Meetings	$ 800.00
Equipment and Repairs	400.00
Payroll Taxes	150.00
Postage	400.00
Printing and Mailing, Office Supplies, Publications and Pamphlets Purchased	1,500.00
Administrative Salaries	10,000.00
Office Salaries	1,000.00
Travel Expenses	1,200.00
Fellowships	3,000.00
Special Equipment	2,000.00
Furniture and Fixtures (For New Centers)	500.00
Laboratory Aid Plan	6,000.00
Miscellaneous Expenses	50.00
Telephone and Telegraph	200.00
TOTAL EXPENSES (CENTRAL OFFICE)	$ 27,200.00
Control Center Expenses:	
Alpena	$ 100.00
Ann Arbor	600.00
Battle Creek	0
Bay City	400.00
Benton Harbor	300.00
Detroit	3,000.00
Flint	0
Grand Rapids and Muskegon	3,400.00
Jackson	100.00
Kalamazoo	1,000.00
Lansing	300.00
Marquette	0
Petoskey	200.00
Pontiac and Royal Oak	1,000.00
Port Huron	300.00
Saginaw	200.00
Sault Ste. Marie	100.00
Traverse City	1,000.00
TOTAL EXPENSES (CONTROL CENTERS)	$ 12,000.00
TOTAL EXPENSES	$ 39,200.00
Loss for Year	$ 17,296.32
Balance from Prior Years	$ 15,863.57
Balance to Next Year (Loss)	$ 1,432.75

DETROIT PHYSIOLOGICAL SOCIETY

(Continued from Page 302)

chemical linkage of nitrogen mustard is evident from the chemical structures.

TEM can be given both orally and intravenously. The local and systemic toxic effects are less severe than those of nitrogen mustard. TEM affects the immature as well as mature cells of both myeloid and lymphoid series. The marrow changes parallel the blood changes with the exception that no significant marrow changes are observed in acute leukemia although the peripheral stem cell counts drop sharply.

Although final evaluation of TEM cannot be made on the basis of present evidence, it can be said that the drug has a definite place in the treatment of systemic Hodgkin's disease, chronic myelocytic and lymphocytic leukemia. We suggest 5 mg. (one tablet) orally for one or two days and no further therapy until maximum effect is observed in two to three weeks. The usual guides for treatment with other forms of cancer chemotherapy, particularly nitrogen mustard, can be applied to treatment with TEM. When used in carefully selected patients, TEM may be an important therapeutic adjunct until better methods of treatment become available.

TIME FOR APPRAISAL

(Continued from Page 305)

cal care, partial medical care, or complete coverage for real catastrophe?

We are also faced with the increasing number of aging people, many of whom have subscribed to one or another prepayment plan during the years of productive life. Frank Weiser, writing in *The Detroit Medical News,* has proposed that it is feasible actuarially to set up credits from the premium payments in these productive years, similar to premium waiver in other insuring techniques, which become available in the later years. This should engage the serious study of all.

Despite the mad rush to build new hospital beds, the fact will be very much with us for a long time that we have no technique to ensure the full operation of these new beds because we are not training enough paramedical and paranursing hands. Cannot the voluntary prepayment plans so enlarge the opportunities for office procedure that useful beds are kept available for the true hospitalizable emergency?

These are basic problems which we now have time to study, and out of this study, in this breathing spell, can come clear answers which will be good for all the people.

William Bromme, M.D.

How can one make an early diagnosis of lymphoma? Never, unless one remains aware of the possibility when confronted with a patient presenting early lesions, such as a single swollen lymph node or a localized group of enlarged nodes, and is willing to see to it that a biopsy is done promptly and is submitted to a competent pathologist for interpretation.

Michigan's Department of Health

Albert E. Heustis, M.D., Commissioner

STILLBIRTH DEFINED

Section 326.15, Compiled Laws of 1948, as amended by Act 65, P.A. of 1952 provides that it shall be the responsibility of the state health commissioner to define a stillbirth (fetal death). In accordance with this provision, Dr. Heustis has issued the following definition:

Stillbirth is death prior to the complete expulsion or extraction from its mother of a product of conception which has advanced through the twentieth week of uterogestation; the death is indicated by the fact that after such separation, the fetus does not breathe or show any other evidence of life such as beating of the heart, pulsation of the umbilical cord, or definite movement of voluntary muscles. A stillbirth certificate must be filed.

If the child shows any evidence of life after complete birth, even though it be only momentary, the birth shall be registered as a live birth, and a death certificate shall also be filed.

COMMISSIONER'S CONFERENCE MAKES RECOMMENDATIONS

Thirty-seven directors of full-time local health departments spent three days at the Department offices attending the Fourth Annual Commissioner's Conference of full-time local health directors. The Conference functioned through four working committees and made thirty-five recommendations to the State Health Commissioner on program handling, grouped under administration, disease control, maternal and child health, and environmental health.

MICHIGAN'S GOITER CONTROL PROGRAM WINS ATTENTION

"Goiter Prevention with Iodized Salt; Results of a Thirty-Year Study" is the title of a paper by Brock E. Brush, M.D., and J. K. Altland, M.D., in a recent issue of the *Journal of Clinical Endocrinology and Metabolism.*

Dr. Brush and Dr. Altland discussed this topic on the Michigan Health Council television show on March 1.

NEW POLICY STATEMENT ON FLUORIDATION OF WATER SUPPLIES

A statement of policy on fluoridation of public water supplies has been issued by the Department to supersede that of July, 1950.

The supplementation of all public water supplies in the state deficient in fluoride is strongly recommended. Before communities undertake to supplement their fluoride deficient water supplies, an application for the necessary permit should be submitted to the Michigan Department of Health. The statement advises that local dental and medical professions be included in all discussions and their approval be secured. The results of the Grand Rapids fluoridation study are summarized briefly in the folder. Copies are available to anyone interested upon request to the Section of Public Health Dentistry.

GETTING READY FOR SUMMER VISITORS

The Department's Tourist and Resort Standards are now being revised by the Division of Engineering in consultation with personnel of local health departments, in preparation for the summer program of inspection. The new HDA, Health Department Approved, resort signs are being sent to local health departments. The sign will be issued only after an agreement form has been signed by the resort operator and a metal tag attached to the sign will carry the number of the agreement form.

"FAMILY HEALTH IS PUBLIC HEALTH," CONFERENCE THEME

The thirty-second Annual Michigan Public Health Conference will be held in Grand Rapids, May 20 to 22, with speakers and discussion groups centering attention on the family in public health. Topics include the role of research in family nutrition, the family and neighborhood environment, a family takes care of its health, how the family meets the cost of medical care, family patterns which create health problems and the modern family—its acceptance or rejection of scientific information.

HEALTH OFFICERS APPOINTED

J. D. Monroe, M.D., Director of the Oakland County Health Department, has been appointed acting director of the Pontiac City Health Department to serve until final steps have been taken toward the combination of these two departments.

C. A. Neafie, M.D., former director of the Pontiac City Health Department, has been appointed deputy health officer of the Oakland County Health Department.

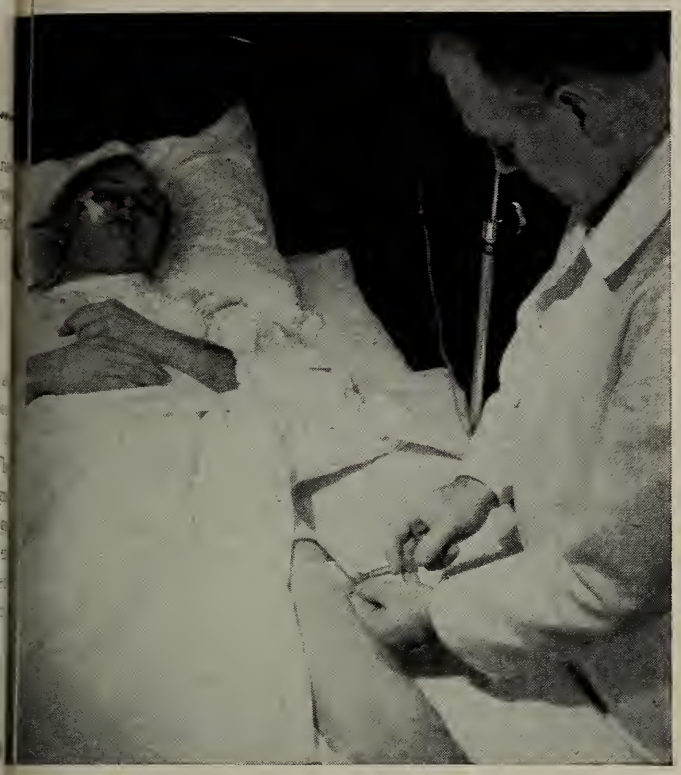
T. W. Mahoney, M.D., has resigned as director of the Monroe County Health Department, effective January 31.

A new directory of local health departments in Michigan has been issued by the Division of Local Health Administration and is available upon request.

NUTRITION BOOKS FOR PUBLIC LIBRARIES

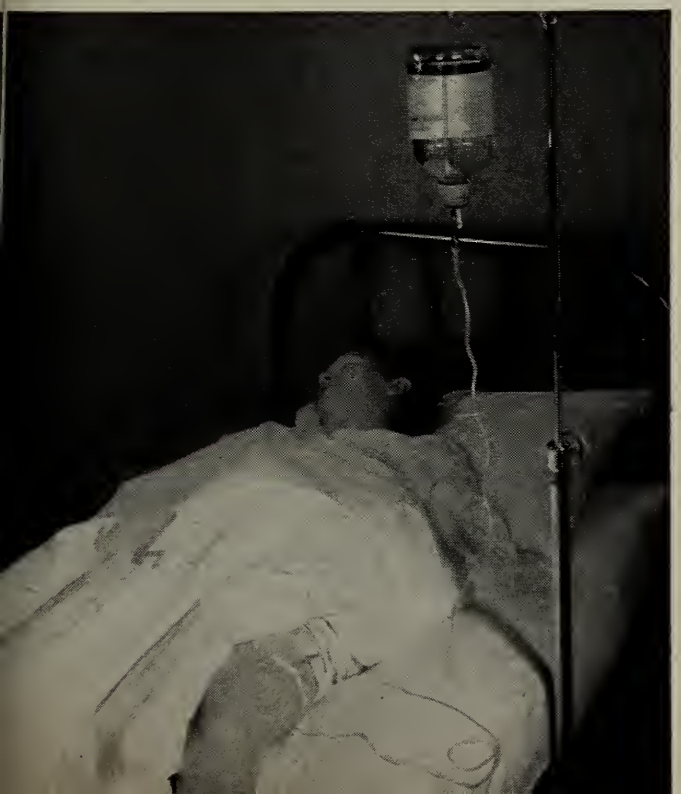
A list of nutrition books recommended for the public has been prepared by the Section of Nutrition, primarily to help local health department personnel answer the requests of librarians for authentic material. The increase in faddist publications in nutrition and the widespread popular interest in the subject make it increasingly important that sound books be readily available. Copies of the Library Book List are available to anyone interested, upon request to the Section of Nutrition.

Use of Alidase® Permits Subcutaneous Administration of Fluids at Usual Intravenous Rates



In operative states—Alidase circumvents the complicating factors of venous thrombosis and "wornout" veins which frequently make fluid administration by vein difficult and dangerous. Simplicity and safety of Alidase make hypodermoclysis a method of choice for preoperative preparation and postoperative maintenance.

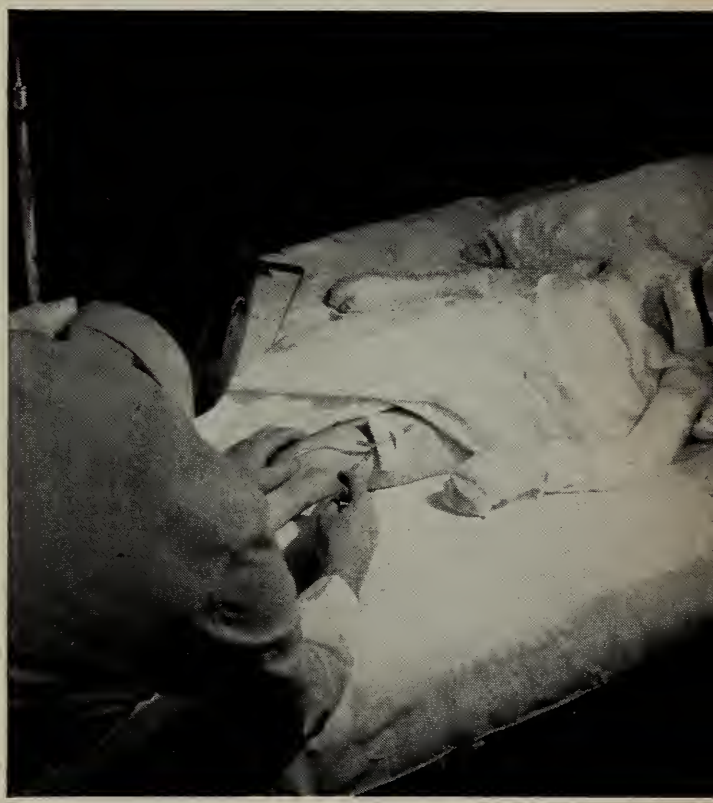
In burns—Plasma and electrolyte solutions can be given subcutaneously at effective rates when Alidase is employed; collapsed veins or risks of thrombosis are not a problem with this method.



Addition of Alidase to the first few cubic centimeters of fluid during hypodermoclysis speeds absorption to a degree approximating that of the intravenous route. Use of highly purified hyaluronidase in this manner avoids the well-known difficulties encountered with venoclysis, saves valuable nursing time and is more comfortable to the patient.

Hechter, Dopkeen and Yudell[1] have found that the use of hyaluronidase has "markedly increased the rates of absorption and administration of hypodermoclysis with no untoward reactions." They also found that extremely small amounts of this enzyme facilitated the absorption of fluids in that greater amounts of fluids were absorbed by the patient in a given period of time and that the localized swelling following hypodermoclysis disappeared more promptly.

Similar results with Alidase were recounted by Schwartzman, Henderson and King.[2] They observed "that absorption of various types of solutions, such as saline, glucose in saline, Hartmann's solution, Ringer's solution, penicillin, streptomycin, Adrenalin, and procaine was facilitated in every case."



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1. Hechter, O.; Dopkeen, S. K., and Yudell, M. H.: The Clinical Use of Hyaluronidase in Hypodermoclysis, J. Pediat. 30:645 (June) 1947.
2. Schwartzman, J.; Henderson, A. T., and King, W. E.: Hyaluronidase in Fluid Administration: A Preliminary Report, J. Pediat. 33:267 (Sept.) 1948.



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Legal Opinions

L. Fernald Foster, M.D., Secretary
Michigan State Medical Society
Lansing 15, Michigan

Dear Doctor Foster:

A member of the MSMS has directed the following inquiry to you:

"We have a county hospital located at Centreville, Michigan, which cares for indigents. Some osteopaths from the county have patients in this hospital and have been taking care of them. Some doctors were beginning to question whether we should take patients in the same hospital. We don't like it; but, as it is a county hospital, we are not just sure what to do about it."

You have referred Dr. ————'s letter to me for opinion as to the legal aspects of the matter.

Unfortunately, Dr. ———— does not state whether or not the county hospital at Centreville is one established and operated under Act 350, P. A. 1913. As you know, the Michigan State Medical Society has consistently taken the position that the governing board of any hospital has the right to make reasonable rules and regulations concerning the qualifications of the staff and physicians who are permitted the use of its facilities.

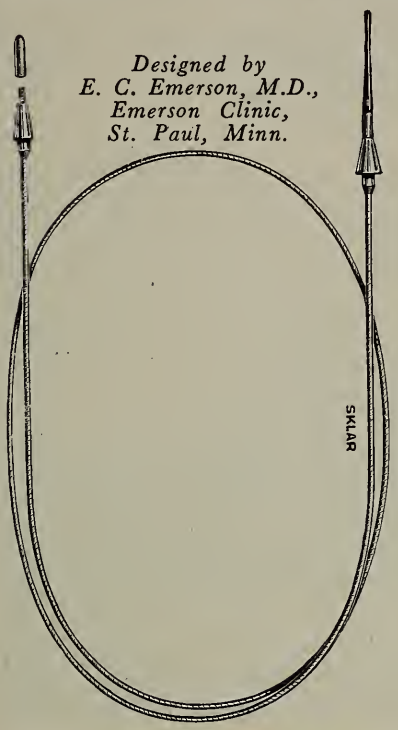
You will recall that as to hospitals established and operated under Act 350 P. A. 1913, the attorney general has given an opinion to the effect that osteopaths may not lawfully be excluded from practicing in such hospitals. However, we have maintained that this opinion does not correctly reflect the status of the law in relation to the question. We have had reliance on the United States Supreme Court case of *Hayman v. Galveston, 273 U. S. 414, 71 L. Ed. 715.*

That case arose in the State of Texas, the Constitution of which provides that anyone who shall "offer to treat any disease or disorder, mental or physical, or any physical deformity or injury by any system or method or to effect cures thereof," is a physician and may be admitted to practice within the state. The Texas Constitution also provides that "the legislature may pass laws prescribing the qualifications of practitioners of medicine in this state, and to punish persons for malpractice, but no preference shall ever be given by law to any schools of medicine."

The John Sealy Hospital was a municipal hospital operated in the City of Galveston. The hospital board charged with the management and control of the hospital made rules and regulations which excluded osteopaths from practicing in the hospital. The plaintiff was an osteopath who endeavored to refrain the hospital board from excluding him under its rules. He claimed that the rule of excluding osteopaths was contrary to the Texas Constitution and contrary to the United States Constitution, on the ground of discrimination against a class, and constituted a denial of due process of law.

(Continued on Page 326)

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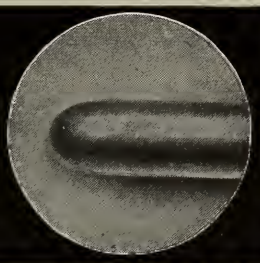
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(Continued from Page 324)

The Supreme Court of the United States, however, denied plaintiff's claim and said:

"We cannot say that a regulation excluding from the conduct of a hospital the devotees of some of the numerous systems or methods of treating diseases authorized to practice in Texas, is unreasonable or arbitrary. In the management of a hospital, quite apart from its use for educational purposes, some choice in methods of treatment would seem inevitable, and a selection based upon a classification having some basis in the exercise of the judgment of the state board whose action is challenged is not a denial of the equal protection of the laws."

The Galveston case has never been overruled and still stands as the judicial law of this country. We are of the opinion that it governs the situation in Michigan, both under the County Hospital Act (Act 350, P. A. 1913), as well as other hospitals.

Whether as a matter of policy osteopaths should be admitted to any particular hospital (aside from the legal obligation) is something to be decided by the individual hospital board. As far as I know, the Michigan State Medical Society has consistently taken the position that the standard of practice by osteopaths is below that which doctors of medicine are attempting to maintain and improve. The public is entitled to the best diagnostic and therapeutic care that science can afford, and doctors of medicine have not encouraged the public to accept second best medical care. Moreover, unless a doctor of medicine is required by law to share hospital facilities with osteopaths or other cultists, they come into violation with the *Principles of Medical Ethics* of the American Medical Association.

Very truly yours,
J. Joseph Herbert
Legal Counsel

Lansing, Michigan
January 28, 1953

Wide surgical removal is the usual treatment for desmoid tumors.

* * *

Desmoid tumors are frequently preceded by some form of trauma, such as pregnancy or surgical incision.

* * *

Carcinoma of the vulva comprises 5 per cent of all genital cancer in the female.

* * *

Any patient with pruritus, burning on urination, dysuria, dyspareunia, bleeding or discharge, may have cancer of the vulva, and must be examined carefully.

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Guaiacodyl is indicated for symptomatic relief in chronic bronchitis, bronchial asthma, paranasal sinusitis, bronchiectasis and other respiratory tract conditions where the formation of exudate and tenacious mucous causes difficulty.

DOSAGE: 2 cc daily subcutaneous, reducing gradually to 1 cc every other day.

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In Memoriam

JOHN F. HEFFERNAN, M.D., of Carleton, died January 2, 1953, at the age of seventy-seven. Dr. Heffernan had practiced in the community of Carleton for the past thirty-two years. Prior to that he had practiced in Detroit, Hillsdale County, and Oak Grove. He was graduated from Vanderbilt University School of Medicine in 1916. For a number of years, he was health officer of Carleton and also examining physician for the Pere Marquette and the Chesapeake & Ohio Railroad.

Besides his wife, Mamie, he is survived by two brothers and a sister. They are Judge Joseph L. Heffernan of Youngstown; Martin Heffernan, of Portland, Ore.; and Mrs. James Walsh of Youngstown.

CLARENCE W. LEMMON, M.D., of River Rouge, died January 8, 1953, at the age of sixty-one.

Dr. Lemmon, a general practitioner in River Rouge and Detroit since 1919, was graduated from Western Reserve University School of Medicine in 1918. He interned at Harper and Herman Kiefer Hospitals, Detroit, and was on the staff of the Delray Hospital, Detroit.

Besides his wife, Helen, he is survived by a brother Charles E. Lemmon, M.D., of Detroit.

FRANKLIN L. REEDER, M.D., of Flint, Past-Speaker of the House of Delegates of the Michigan State Medical Society, died January 5, 1953, at the age of sixty-nine.

For more than forty years Dr. Reeder served the community of Flint as an obstetrician. He was graduated from the University of Michigan Medical School in 1910. Before coming to Flint, he practiced a year in Steubenville, Ohio.

Dr. Reeder was Speaker of the House in 1936 and 1937. He was also a delegate to the American Medical Association House of Delegates for a number of years.

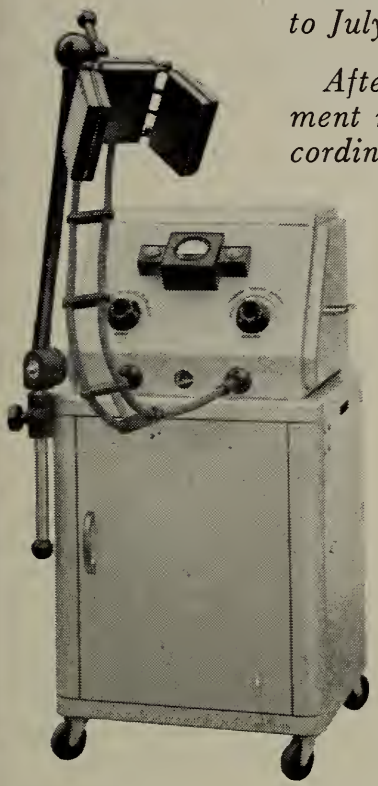
Before and during his medical studies, Dr. Reeder played professional baseball under the name of "Joe Kelly." He played in several leagues in New York, Ohio, Pennsylvania, New Jersey and Michigan. Dr. Reeder also assisted Branch Rickey, then coach at Michigan, during his days at the University.

Dr. Reeder was a past president of the Genesee County Medical Society and a former chief of staff at Hurley Hospital. During World War. I, he was a first lieutenant in the medical corps.

Dr. Reeder was a trustee of the Flint Public Schools from 1914 to 1916 and served for four years (1930-34) as a member of the Flint Public Welfare Board.

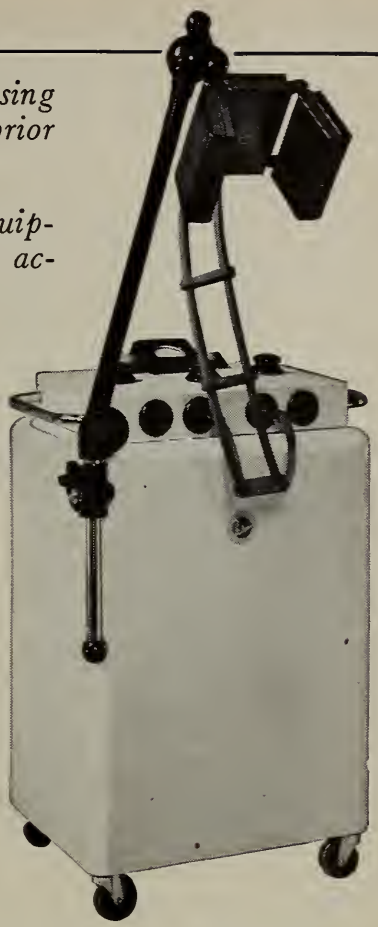
He is survived by his wife, Pansy.

Say you saw it in the Journal of the Michigan State Medical Society



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Communications

Journal of the Michigan State Medical Society
Battle Creek, Michigan

Dear Sir:

In perusing the current literature with which this journal is concerned, we note that an ever-increasing number of its articles deals with problems pertaining to research on "stress" and the so-called "adaptive hormones" (ACTH, STH, corticoids, adrenergic substances, etc.).

We are writing you because, in our opinion, the success of research in this complex and rapidly developing field largely depends upon the prompt availability and evaluation of relevant publications, a task for which we should like to solicit the assistance of your readers.

In 1950, our Institute has initiated the publication of a series of reference volumes entitled "Annual Reports on Stress" (Acta Medical Publishers, Montreal) in which the entire current world literature is surveyed every year (usually between 2,000 and 4,000 publications). Up to now, we had to compile the pertinent literature partly from medical periodicals, monographs, abstract journals and partly from reprints sent to us by the authors themselves. Of all these, reprints proved to be the best source of data which we felt deserved prompt attention in our annual reports. Hence, in the past, we have sent out several thousand individual reprint requests to authors of whom we knew that they are currently engaged in research on stress and allied topics. Even this procedure did not give us the wide coverage which would be desirable, because it is materially impossible to contact all these authors individually and it often takes too much time to get the requested reprints.

It is evident that in order to insure prompt inclusion of publications in the annual reports, these surveys must develop into a co-operative effort between the authors of original papers and the reviewers. This co-operation was greatly enhanced of late by the publication of announcements, in several medical journals, encouraging investigators interested in stress research to send us their reprints for this purpose as soon as they become available.

We should be grateful if by the publication of this note, you would also bring this problem to the attention of your readers.

We are, Sir,

Very sincerely yours,
HANS SELYE, M.D., Ph.D., D.Sc., F.R.S.(C.), Professor and Director of the Institute of Experimental Medicine and Surgery.
ALEXANDER HORAVA, M.D., Co-author of the "Annual Reports on Stress."

Montreal, Quebec
January, 1953

Dear Dr. Haughey:

To date, we have received pledges from 802 alumni totaling over $103,000, leaving $97,000 to be raised in order to attain our goal of $200,000. To help raise this balance, several of us have volunteered to increase our original cash gifts, payable on an annual basis over a period of several years.

An analysis of pledges shows that over a hundred alumni have pledged $300 or more, most of them payable over a three-year period. A few of the $1,000 pledges are at the rate of $100 for ten years.

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We would reach our goal if the alumni who have pledged $100 to $250 would bring their pledges up to $300, the balance payable over three years, and if those who pledged less than $100 would at least renew their original donations.

We realize that many of the smaller gifts have come from the older alumni who have retired from practice or from recent graduates who can afford only a small sum. We hope that each will give whatever he can afford as an additional gift in order to assure the success of our project.

The contributions to the Medical Library Fund are income tax deductible. The Medical Education Foundation of the AMA will give full credit for each contribution. The Foundation has recommended a one hundred dollar yearly gift toward medical education.

We are holding off the printing of the final Honor Roll by classes and regions so that each will have an opportunity to receive full credit for the maximum amount pledged.

With gratitude for your co-operation.

Sincerely,
WILLIAM J. STAPLETON, JR., M.D., '02,
Treasurer, Wayne University Medical Library Fund.

Detroit, Michigan
February 10, 1953

Dear Dr. Haughey:

It is a pleasure to tell you how much we enjoyed your January, Annual Heart Number, issue of the JMSMS. We can thoroughly appreciate the issue as we are coming out with our February *Journal of the Medical Association of Georgia*, devoted to the heart.

Dr. David Henry Poer, Editor of the JMAG, also wishes to compliment you on the excellence of THE JOURNAL. In our opinion it well serves as a guide among the better medical journals. Of particular note, besides the superior content of the articles themselves in the January issue, was the cover and the double spread illustrations on pages 78 and 79.

Our best wishes to you.

Cordially yours,
Medical Association of Georgia
MILTON D. KRUEGER
Director of Publications

Atlanta, Georgia
February 10, 1953

Dear Wilfrid:

This is just a note of commendation on the Editorial in the recent Michigan State Medical Society JOURNAL titled "Officers' Recompense." It certainly hit the nail on the head, and is an Editorial which is apropos and to the point, and I trust that those who need it most will heed it and read it. I enjoy THE JOURNAL very much and feel it contains a tremendous amount of information, both scientific and otherwise, and you have done a first-class job in keeping up the standard, which in these days is no easy task.

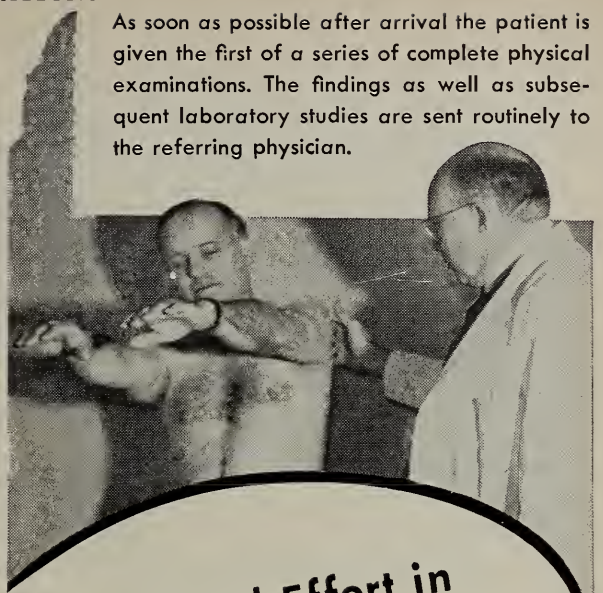
Once again my best wishes for a Happy New Year, and everything good for 1953.

Sincerely yours,
EUGENE A. OSIUS, M.D.

Detroit, Michigan
January 5, 1953

Dear Mr. Burns:

I have today received a memorandum from Carl Neupert, M.D. (Wisconsin State Health Commissioner) which calls attention to a typographical error on page 64 of the proceedings of the American Medical Association



As soon as possible after arrival the patient is given the first of a series of complete physical examinations. The findings as well as subsequent laboratory studies are sent routinely to the referring physician.

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DWIGHT, ILLINOIS

Council on National Emergency Medical Service dated November 5, 1952.

Doctor Neupert is quoted as saying, "Public health is a matter of sanitation." He states that he should have been quoted as saying, "Public health is not just a matter of sanitation."

Would you be kind enough to see that this information gets to whoever may be concerned, so that there may be no misunderstanding. Thanks a lot.

Sincerely yours,
ALBERT E. HEUSTIS, M.D.
Commissioner, Michigan Department of Health

Lansing, Michigan
February 12, 1953

COMMENTS CONCERNING THE MMS NUMBER

Dear Mr. Goodrich:

Thanks so much for sending on to me the June, 1952, issue of THE JOURNAL of the Michigan State Medical Society.

When you see Dr. Novy, tell him that I am reading it with a great deal of interest.

EDWARD J. MCCORMICK, M.D., *President-Elect, American Medical Association*

Dear Mr. Goodrich:

I have your copy of the June issue of THE JOURNAL of the Michigan State Medical Society with a very fine article on Blue Shield. I appreciate this and commend you for the wonderful work the Blue Shield is doing in Michigan. Will you please express to Dr. Novy my thanks for his suggesting that you send me a copy. Somebody must start a project like this and I am glad that Michigan is at the front.

J. J. MOORE, M.D., *Treasurer, American Medical Association*

Dear Dr. Novy:

I want to thank you very kindly for sending me THE JOURNAL of the Michigan State Medical Society for June, 1952. I have just had an opportunity of going over some of "You Built It" and I think it is an outstanding job. Your growth chart is certainly an enviable record to shoot at and your manner of organization in districts shows what can be done if the doctors are willing to do their part.

I shall be happy to follow your continued growth and want to congratulate you on your activities as president of Michigan Medical Service and I am sure that as long as men of your caliber and ability are in the forefront Michigan Medical Service will continue to prosper.

With kindest regards and best wishes, I am

JAMES R. MCVAY, M.D., *Board of Trustees, American Medical Association*

Dear Mr. Goodrich:

I wish to thank you for your note of July 2 enclosing a copy of the June, 1952, issue of THE JOURNAL of the Michigan State Medical Society which is dedicated to the Michigan Medical Service. I appreciate your kindness very much indeed.

E. L. HENDERSON, *Past President, American Medical Association*

Dear Mr. Goodrich:

Many thanks for the June, 1952, issue of THE JOURNAL of the Michigan State Medical Society which was dedicated to Michigan Medical Service. It is most interesting and the information contained therein should be most helpful to any and all interested in voluntary health plans.

I was also interested in the historical portion dealing with the Michigan State Medical Society and the 1952 annual meeting.

Kindly convey my appreciation to Dr. Novy for his thoughtfulness in suggesting that I receive a copy.

J. D. MCCARTHY, M.D.
Omaha, Nebraska



Dear John:

The June, 1952, issue of your state society bulletin which devoted all the space to MMS was a honey, and I am green-eyed with envy over the obviously close liaison you have worked out with the state society to make such an edition possible. I am hopeful that someday we may be able to accomplish the same thing.

In an effort to further such an endeavor, I wonder if it would be possible for you, if you have sufficient copies available, to mail one to each of our Board of Trustee members and to the members of the Executive Committee of the California Medical Association. Such a mailing could be done without a covering letter, I believe. In case these arrangements can be made, I am enclosing a mailing list of our Board of Trustee members and those of the Executive Committee of the CMA. However, if such a mailing is not feasible, just drop me a line and tell me so. I would like to hear from you anyway, in fact.

MARSHALL VIRELLO, *Director*
Public & Physician Relations
California Physicians' Service

Dear John:

I read with interest the very excellent article entitled, "You Built It," which appeared in the June, 1952, issue of THE JOURNAL of the Michigan State Medical Society. Would it be possible for me to obtain several reprints of this article?

LENNARD J. RAIDER, M.D., *Vice President,*
United Medical Service, New York, N. Y.

"The great opportunity of a medical society is that it can help its members to raise the level of the entire profession."—JOHN W. MOCK, Evanston, Ill.

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30 days of Nurse at Home	5.00 per day	10.00 per day	15.00 per day	20.00 per day
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Anesthetic in Hospital	10.00	20.00	30.00	40.00
X-Ray in Hospital	10.00	20.00	30.00	40.00
Medicines in Hospital	10.00	20.00	30.00	40.00
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Adult	2.50	5.00	7.50	10.00
Child to age 19	1.50	3.00	4.50	6.00
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. . . . . NEWS MEDICAL

MICHIGAN AUTHORS

F. H. Bethell, M.D., of Ann Arbor, is the author of an article, "Control of U.S.P. Anti-Anemia Preparations," published in *The Journal of the American Medical Association, January* 3, 1953.

A. L. Drew, M.D., and **K. R. Magee, M.D.,** of Ann Arbor, are the authors of an article, "Chemical Encephalomyelopathy," published in *The Journal of the American Medical Association,* February 7, 1953.

Carey P. McCord, M.D., of Ann Arbor, is the author of an article, "Expert Testimony," published in *Industrial Medicine and Surgery,* February, 1953.

Lawrence Reynolds, M.D., K. E. Corrigan, Ph.D. and **H. S. Hayden, Ph.D.,** Detroit, are authors of an original article, "Detection of Concealed Thyroid Disease by Tracer Technique" which appeared in JAMA of January 31.

E. S. Gurdjian, M.D., and **J. E. Webster, M.D.,** Detroit, are authors of an original article "Stroke Resulting from Internal Carotid Artery Thrombosis in the Neck," which appeared in the JAMA on February 14.

* * *

The Cover Art for this Cancer Number of JMSMS was prepared by Vernon Kauffman of Lansing, Michigan.

* * *

The American College of Surgeons' Annual Symposium on Trauma and Nutrition, which will be held May 21, 1953, will be in Ann Arbor, Michigan, not Detroit as listed in the November JMSMS, page 1392.

* * *

Donald H. Kaump, M.D., was recently appointed Medical Director of Providence Hospital, Detroit. He came to Providence Hospital as pathologist and Director of Laboratories in January, 1940, following his Fellowship in Pathology at the Mayo Clinic and the University of Minnesota.

Dr. Kaump is an Associate Professor of Pathology at Wayne University College of Medicine, a member of the Michigan Pathological Society, where he served as President in 1949, a member of the American Association of Pathologists and Bacteriologists and holds Fellowships in the American Society of Clinical Pathologists and the College of American Pathologists. In the College of American Pathologists, he currently serves as a Governor.

* * *

The American College of Allergists, Inc. will hold its ninth annual Congress and Graduate Instructional Course in Allergy, April 24-29, 1953, at the Conrad Hilton (The Stevens) Hotel, Chicago. A very full program is announced covering forenoon, afternoon and evening sessions with four evening seminars.

* * *

Major General George E. Armstrong, The Army Surgeon General, returned to Washington on January 28 after a 25-day visit of Army medical installations in Korea, Japan, Okinawa and Hawaii. In Korea General Armstrong also visited battalion aid stations on the fighting front. The General reports high morale among Army medical personnel at all points visited. He was accompanied by Dr. Elmer Hess of Erie, Pa., consultant in Urology to the Army Surgeon General; Col. Floyd L. Wergeland, MC, Chief, Education and Training Division of his Office; and Lt. B. W. Wingo, MSC, his staff assistant.

* * *

New Outpatient Clinic.—At an expense of $3,726,800 provided by State appropriation, the new Outpatient Clinic at University Hospital was opened and has been in operation since January 1, 1953. It is a seven-story building with 125,340 square feet of floor space. It is located just northeast of the main hospital building, and connected by a special bridge section to the University Hospital's basement, ground and first floor levels.

Twenty-four clinics are located in the building. Each of the seven levels has a comfortably furnished waiting room, with wide hallways and corridors, and four elevators. There are 196 examining areas, and more than a hundred offices for physicians, nurses and secretaries. There are also enlarged staff rooms on each level.

All members of the consulting and attending staff of the University Hospital are housed in this "clinic." It is expected that the present level of 250,000 outpatient clinic calls per year will be trebled.

* * *

The American Academy of Neurology is again offering special courses in various aspects of neurology and allied disciplines.

Courses in Neuropathology and Clinical Electroencephalography are being repeated, as is the course in Neuroroentgenology. The latter course has proven so popular that it will be presented as a two-day course this year because of the wealth of material. Other courses to be presented this year are Special Problems in Clinical Electroencephalography, Episodic Disturbances of the Nervous System, Clinical Neuro-ophthalmology, Language Disabilities, Brain Tumors and Neurological Anatomy.

Fees are moderate and many courses offer atlases, loan-boxes of slides, syllabi, discussion sessions, etc. Modern

(Continued on Page 336)

Detroit Medical Hospital



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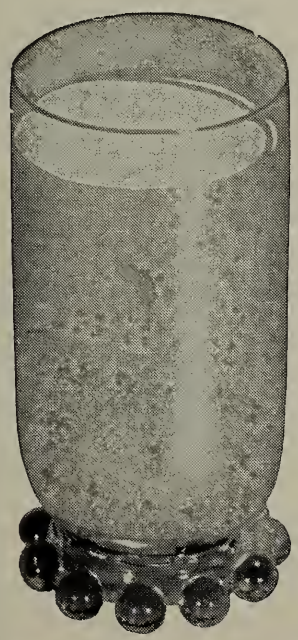
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(Continued from Page 334)

projection techniques will be used to demonstrate material.

There will be three days (April 6, 7, 8) of special courses preceding the Fifth Annual Meeting of the Academy. Courses and meeting will be held at the Edgewater Beach Hotel, Chicago, Illinois. Details can be obtained by writing Mrs. J. C. McKinley, 19 Millard Hall, University of Minnesota, Minneapolis, Minnesota.

* * *

A summer camp for diabetic children will be opened for the fifth season under the auspices of The Chicago Diabetes Association, Inc., from July 21, 1953, to August 10, 1953, at Holiday Home, Lake Geneva, Wisconsin.

In addition to the regular personnel of the camp, there will be a staff of dietitians and resident physicians, trained in the care of diabetic children, furnished by The Chicago Diabetes Association.

Boys and girls, aged eight to fourteen years, inclusive, will be accepted at a fee of $150.00 (which covers the three-week camping period and transportation from Chicago). Fee reductions may be arranged when considered necessary.

Inquiries should be addressed to: Service Unit, Chicago Diabetes Association, 110 South Dearborn Street, Chicago 3, Illinois.

* * *

Walter N. Donaldson, M.D., Editor of the *Pennsylvania Medical Journal* writes (February 3, 1953): "My admiration for the Michigan State Medical Society increases each year. For our next annual meeting, the program will follow very closely yours of 1952."

* * *

Calhoun County Cancer Education Day.—The tenth Cancer Education Day, sponsored by the Calhoun County Medical Society and the Calhoun County Unit of the American Cancer Society, will be held April 7 at the Hart Hotel, Battle Creek.

Following cocktails at 5:30 and dinner at 6:30 p.m., Brewster Miller, M.D., National Director of Professional Education, American Cancer Society, will give the principal address on "Recent Advances in Cancer Research." All doctors of medicine are invited to this meeting.

* * *

Small towns and rural areas do not supply enough medical students to insure proper distribution of doctors in this state, University of Michigan medical authorities have reported.

Dr. Albert C. Furstenberg, dean of the university medical school, explained that the new doctor usually returns to his home town or one of similar size to practice.

This has led, he said, to a shortage of doctors in the Upper Peninsula and upper sections of the Lower Peninsula.

Six counties of Upper Michigan and sixteen in Lower Michigan, with a combined population of more than 200,000, have not sent a single student into the

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university medical school in the last four years, reported Wayne L. Whitaker, medical school secretary.

"These figures are disturbing when rural areas and small towns are faced with such a need for doctors," he said.

Tuberculosis death rates in Michigan will drop sharply from 17.6 per 100,000 population in 1951 to less than 13 per 100,000 in 1952, the state health department estimates. But . . .

NEW CASES OF TUBERCULOSIS CONTINUE HIGH . . . an estimated 6,200 in Michigan for 1952 compared with 6,144 the year before. More than half of tuberculosis cases are in ADVANCED STAGES when first diagnosed . . . potential sources of infection for unknown periods of time. Estimates indicate that Michigan has 6,200 UNKNOWN ACTIVE CASES.

Finding the cases and hospitalizing them promptly are urgent needs in tuberculosis control.

—MICHIGAN TUBERCULOSIS ASSOCIATION

The Committee on Medical Motion Pictures of the AMA has completed the fourth supplement to the booklet entitled "Reviews of Medical Motion Pictures." It contains all the film reviews published in *The Journal,* from January to December, 1952.

The purpose of the reviews is to provide a brief description and evaluation of motion pictures which are available to the medical profession. Each film is reviewed by competent authorities.

* * *

Wilbur F. Hoyt, M.D., of Paw Paw, recently was honored by his community upon the completion of sixty-seven years of practice—on his ninety-second birthday.

Dr. Hoyt's host of former patients and friends gathered to present to him a birthday cake and other gifts commemorating his many years of medical service to the community of Paw Paw and the County of Van Buren.

* * *

Louis J. Hirschman, M.D., Traverse City, was selected by the Governor to represent Michigan at a meeting of the World Medical Association to be held in Richmond, Virginia, April 23-25. Dr. Hirschman, designated by Governor Williams as "Michigan's Doctor of the Year" will meet with other seventy-five-year-old representatives, one from each state of the Union, at the WMA gathering. Dr. Hirschman has practiced medicine for fifty-two years, most of them in the City of Detroit. He is a Past President of the Michigan State Medical Society.

* * *

Hartman A. Lichwardt, M.D., Detroit, was named by the Governor as a new member of the State Alcoholics Commission, to serve a term expiring September 30, 1955. Congratulations, Dr. Lichwardt!

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WAYNE UNIVERSITY COLLEGE OF MEDICINE ALUMNI ASSOCIATION

Annual Clinic Day Program

Wednesday, May 13, 1953

Hotel Fort Shelby, Detroit, Michigan

"Acute Abdominal Emergencies"—RUDOLF J. NOER, M.D., Professor of Surgery, University of Louisville, Louisville, Kentucky

"The Diagnosis of Pulmonary and Mediastinal Lesions"—JULIAN JOHNSON, M.D., Professor of Surgery, University of Pennsylvania, Philadelphia, Pennsylvania

"The Care of Hand Injuries"—MICHAEL MASON, M.D., Professor of Surgery, Northwestern University, Chicago, Illinois

"Rehabilitation in the Management of Arthritis"—FRANK KRUSEN, M.D., Mayo Clinic, Rochester, Minnesota

"Injuries to the Lower Urinary Tract in the Female"—NORMAN F. MILLER, M.D., Professor of Gynecology, University Hospital, Ann Arbor, Michigan

Panel: "The Management for Certain Cardiovascular Diseases Amenable to Surgery"

Moderator: CHARLES JOHNSTON, M.D., Professor of Surgery, Wayne University, Detroit, Michigan

Clinical Aspects—LLOYD T. ISERI, M.D., Assistant Professor of Medicine

Physiology—HARPER K. HELLEMS, M.D., Assistant Professor of Medicine

Surgery—PRESCOTT JORDON, M.D., Assistant Professor of Surgery

Pathology—TOMIHARU HIRATZKA, M.D., Assistant Professor of Pathology

Anesthesia—FERDINAND E. GREIFENSTEIN, M.D., Professor of Anesthesia

A reception in the evening will be followed by the annual banquet which will honor the class of 1903. Reunions will be held for the classes of 1908, 1913, 1918, 1923, 1928, 1933, 1938, 1943, 1948.

The trustees of the Wayne University Medical Library Fund, Incorporated, will hold the annual meeting at 5 o'clock on the afternoon of the Clinic Day.

* * *

William Bromme, M.D., Detroit, MSMS Council Chairman, addressed the Northern Michigan Medical Society in Charlevoix on February 12. His subject was "Problems of Medical Organization."

Dr. Bromme has been appointed by the Governor as a member of the State Veterans Hospitalization Commission.

Congratulations, Dr. Bromme!

* * *

L. Fernald Foster, M.D., Bay City, MSMS Secretary, and a member of the AMA State Journal Advertising Bureau Advisory Committee, is chairman of the Journal Conference for Editors and Business Managers of State Journals, a conference sponsored by the American Medical Association, to be held in Chicago November 9-10, 1953.

Dr. Foster was the "keynoter" at the Blue Cross-Blue Shield Hospital and Physicians Relations Conference, Chicago, February 11-12-13, 1953. Dr. Foster spoke at the luncheon meeting, February 11, on "Concept of Blue Cross-Blue Shield."

* * *

The "Beaumont Memorial Lecture" has been created by the Michigan State Medical Society. Upon recommendation of the Committee on Scientific Work, The Council approved the creation of this Memorial Lecture in connection with the MSMS Annual Session.

The first Beaumont Memorial Lecture will be presented at the 1953 Annual Session, on Thursday, Septem-



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ber 24, from 2:00 to 2:30 p.m.

The Lecture in 1953 will be presented in the Black and Silver Ballroom of the Civic Auditorium, Grand Rapids.

* * *

Reed M. Nesbit, M.D., Ann Arbor, was guest speaker at the first annual meeting of the Toledo Chapter, American College of Surgeons, held at the Commodore Perry Hotel, Toledo, on February 19.

* * *

Nathan Hack, long-time JMSMS advertiser and State Society exhibitor, is the subject of a picture-story in the "Interesting People" section of *The American Magazine,* February issue.

Congratulations, Mr. Hack!

* * *

Question: "Does Blue Cross coverage terminate when the doctor of medicine discharges the patient?"

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* * *

The Seventh Annual Rocky Mountain Cancer Conference will be held in Denver on July 8 and 9, 1953. As in previous years, there will be eight outstanding guest speakers. On the first evening a banquet and entertainment for both the doctors and their ladies will be held. There is no registration fee for this Conference. For program, write Harvey T. Sethman, Executive Secretary, 835 Republic Building, Denver 2, Colorado.

* * *

Michigan Health Council elected new officers at its January 17 meeting in Lansing:

President—H. B. Zemmer, M.D., Lapeer
Vice President—Herbert Estes, Ann Arbor
Secretary—H. W. Brenneman, Lansing
Treasurer—L. G. Goodrich, Detroit
Medical Advisor—J. S. DeTar, M.D., Milan
Legal Advisor—J. Joseph Herbert, J.D., Manistique

* * *

H. F. Vail, M.D., Bay City, has been appointed to fill the vacancy of the Beaver Island physician. Doctor Vail assumed his activitiess on March 1.

* * *

The Northern Tri-State Medical Association annual meeting will be held in the Rackham Building, Ann Arbor, on Thursday, April 2, 1953. An excellent program has been arranged by the Tri-State Association, representative of Michigan, Ohio and Indiana. All members of these three state medical associations are cordially invited to attend the April 2 meeting in Ann Arbor. For program, write Edwin R. Murbach, M.D., President, Archbold, Ohio.

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Surgical Technic, Surgical Anatomy and Clinical Surgery, four weeks, starting June 1
Surgical Anatomy and Clinical Surgery, two weeks, starting March 16, June 15
Basic Principles in General Surgery, two weeks, starting March 30
Gallbladder Surgery, ten hours, starting April 20
Surgery of Colon and Rectum, one week, starting April 13
General Surgery, one week, starting May 4
General Surgery, two weeks, starting April 20
Fractures and Traumatic Surgery, two weeks, starting June 15
GYNECOLOGY—Intensive Course, two weeks, starting March 16
Vaginal Approach to Pelvic Surgery, one week, starting March 30
OBSTETRICS—Intensive Course, two weeks, starting March 30
PEDIATRICS—Intensive Course, two weeks, starting April 6
Congenital Heart Disease, two weeks, starting May 18
MEDICINE—Intensive General Course, two weeks, starting May 4
Electrocardiography and Heart Disease, two weeks, starting March 16
Allergy, one month and six months, by appointment
UROLOGY—Intensive Course, two weeks, starting April 13
Ten-Day Practical Course in Cystoscopy, starting every two weeks
DERMATOLOGY—Intensive Course, two weeks, starting May 11

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Acknowledgment of all books received will be made in this column, and this will be deemed by us as full compensation to those sending them. A selection will be made for review, as expedient.

PHYSICAL DIAGNOSIS. By Harry Walker, M.D., F.A.C.P., Professor of Clinical Medicine, Medical College of Virginia, Richmond, Virginia. 126 illustrations. St. Louis: The C. V. Mosby Company, 1952. Price $8.00.

Many physicians may feel that because of the recent advances in pathology and the frequent employment of the more exact diagnostic aids in clinical medicine, the physical examination is of less value now than formerly. However, as the author states, "The more one knows about physical diagnosis, the better diagnostician he is certain to be." With this thought uppermost, this new text is presented to the student and physician.

This book is divided into three main sections, each containing many chapters: (1) Physical Diagnosis (in General); (2) Diseases of the Respiratory Systems, and (3) Diseases of the Circulatory System. The chapters are very well written and the illustrations have been carefully selected and are of excellent quality. The author and his collaborators attempt to describe the signs which are generally considered to be most valuable and have done an admirable job. In a field where there are many texts, this one is a welcome and valuable addition. It is clear and concise, yet comprehensive, and can be highly recommended.

G.W.S.

GLOBAL EPIDEMIOLOGY. A Geography of Disease and Sanitation. Vol. II. Africa and the Adjacent Islands. By James Stevens Simmonds, Tom F. Whayne, Gaylord W. Anderson, Harold Maclachlan, and Ruth Alida Thomas. Philadelphia: Lippincott, 1951.

Volume I of this series, by the first four authors of the present volume, was published in 1944 and dealt with India, the Far East, and the Pacific area. That volume was prepared from information accumulated by the Medical Intelligence Division of the Preventive Medicine Service of the Office of the Surgeon General of the U.S. Army during World War II. Its aim was to furnish information which would contribute to the successful prosecution of the war in the Far East through the protection of the health of military personnel and a knowledge of the health facilities and diseases occurring in that region. Its acknowledged inaccuracy and limitations were due to the pressure of time and the lack of much detailed information, but it was a very valuable contribution to geographical medicine and set a pattern for future publications on other regions of the world.

This second volume has been prepared by gathering information not only through reports from local and colonial government agencies and from social and medical literature, as well as correspondence and conferences with authorities on Africa, but also through personal visits by Miss Thomas to various colonial headquarters in Europe and to a number of the countries of Africa. The book is divided into eight sections dealing with

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forty-five countries, protectorates, and colonies. For each political unit the information is given under the following headings: Geography and Climate, Population and Socio-Economic Conditions, Environment and Sanitation, Health Services and Medical Facilities, and Diseases Spread by Direct or Indirect Contact and by Arthropods. Nutritional diseases and miscellaneous conditions are also presented, and each section is followed by an extensive bibliography.

This book is a basic work in preventive medicine. It is essential to our armed services, but now is of equal importance to a peaceful air-travelling world, to industries, visitors, and others coming into other countries of the world.

Its organization, bibliographies and maps make available an extraordinary amount of information in condensed form. Its data on climate, political situations, socio-economic conditions extend its use.

Its limitations are those imposed by the facilities of the countries involved, including medical science, public health, education, and social organization.

It has provided a foundation upon which the World Health Organization and the governments concerned with Africa can develop programs for the improvement of the health and welfare of the people of the African Continent.

An appendix republishes a pamphlet entitled "Health Hints for the Tropics," originally published in 1948 as a supplement to "Tropical Medicine News" of the American Society for Tropical Medicine.

The volume should be available to all persons and agencies interested in the global study of disease, the traveler, and those interested in the developmnt of intrnational co-operation toward human improvement.

THE LITERATURE ON STREPTOMYCIN, 1944-1952. By Selman A. Waksman. New Brunswick, N. J.: Rutgers University Press, 1952. Price $5.00.

"The Literature on Streptomycin" first came to our attention in 1944. This volume is a revised edition of one published in 1948 and consists of a chronological listing of every article that has been published, 5,550 of them. Also included in the book is a list of references covering four pages and author index covering 113 pages, two columns to a page.

This volume is purely a listing but is apparently complete and should be extremely useful in research or in a continuing study of the preparations of streptomycin.

NUTRITION AND DIET IN HEALTH AND DISEASE. By James S. McLester, M.D., Professor of Medicine Emeritus, University of Alabama, William J. Darby, M.D., Ph.D., Professor of Biochemistry and Director of the Division of Nutrition, Vanderbilt University. Sixth Edition. Philadelphia: W. B. Saunders Co., 1952.

This new revision of a most excellent book brings the reader completely up to date with changes in the fields of nutrition and diets. The previous format has been retained and the separation into two parts, Nutrition in Health and Nutrition in Disease, is still present. However, many chapters have been completely rewritten so that the most recent advances are included. The sec-

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tions on vitamins is an outstanding example of this, with the part that folic acid, vitamin B_{12} and vitamin B_6 play in nutrition being given proper emphasis.

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Each chapter ends with a fine selective bibliography so that in any particular subject, the reader can avail himself of classical references and of the most recent developments. This book has been extremely well done and will serve as a valuable reference for the busy practitioner.

G.W.S.

A DOCTOR'S SOLILOQUY. By Joseph Hayyim Krimsky. New York: Philosophical Library 1952. Price $2.75.

This pocket-size book is a collection of thirty-seven essays written by a Doctor of Medicine who has practiced nearly half a century, and has set down his considered thoughts as to the Supreme Being, and the manifest proof of His existence, through both faith and scientific observation. The author discusses the riddles of life, creation, whether man is a machine (a robot is immoral), immunity, growth and evolution, what happens in the germ cell, emotional tensions, religion, the knowledge of God, immortality, sin, the sickness of the soul. Health is harmony and balance within and without. The book is intriguing, and reminds one of Descartes.

AMERICAN POCKET MEDICAL DICTIONARY. A Dictionary of the Principle Terms Used in Medicine, Nursing, Pharmacy, Dentistry, Veterinary Science, and Allied Biological Subjects. Nineteenth edition. Philadelphia and London: W. B. Saunders Company, 1953. Price $3.25; thumb indexed, $3.75.

Here is another Medical Dictionary, well executed, printed on thin but good paper, in two columns, fine print —a complete and useful book. It is brought completely up to date.

PHYSICIAN'S HANDBOOK. By Marcus A. Krupp, M.D., Assistant Clinical Professor of Medicine, Stanford University School of Medicine, Director Palo Alto Medical Research Foundation, Palo Alto; Norman J. Sweet, M.D., Assistant Professor of Medicine, University of California School of Medicine, San Francisco; Ernest Jawetz, Ph.D., M.D., Associate Professor of Bacteriology and Lecturer in Medicine and Pediatrics, University of California School of Medicine, San Francisco; Charles D. Armstrong, M.D., Clinical Instructor in Medicine, Stanford University School of Medicine. Seventh Edition, Lang Medical Publications. Los Altos, California: University Medical Publishers, 1952. Price $2.50.

This is the sixth revision of the Handbook first published in 1941 and is a readily available source of factual data, laboratory procedures and clinical aids used in all branches of medicine. It is of pocket size and of value to both student and physician. Many sections have been completely revised and some may appear to be dogmatic, but this is necessary and excusable for the sake of brevity. As a handbook, it is most adequate and can be highly recommended as such.

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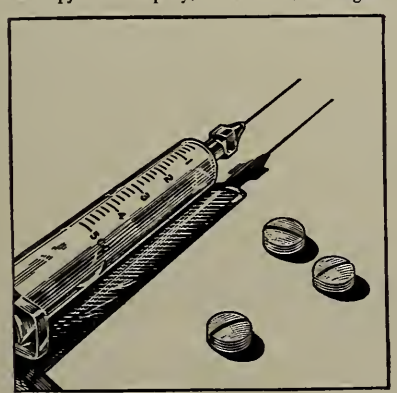
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G. B. Saltonstall, M.D.....Charlevoix
L. Fernald Foster, M.D., *Secretary*....919 Washington Ave., Bay City

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F. M. Doyle, M.D. ....1001 American Natl. Bank Bldg., Kalamazoo
C. W. Oakes, M.D.....Harbor Beach
P. E. Sutton, M.D.....629 Wash. Square Bldg., Royal Oak

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E. H. Fenton, M.D.....15125 Grand River Ave., Detroit
J. T. Jerome, M.D.....217 S. Madison, Traverse City
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You and Your Business

HELP MAKE A 3,000 ATTENDANCE RECORD IN GRAND RAPIDS
MICHIGAN STATE MEDICAL SOCIETY ANNUAL SESSION
September 23-24-25, 1953

HIGHLIGHTS OF EXECUTIVE COMMITTEE OF THE COUNCIL

Meeting of February 18, 1953

Sixty-seven (67) items were presented to the Executive Committee of The Council on February 18. Chief in importance were:

- **Public charges made by Paul R. Hawley, M.D.,** in the national press, and a resolution introduced into the Michigan Legislature by Senator Charles J. Blondy (Dem., Detroit) demanding an examination of Dr. Hawley's charges as they apply to Michigan, were discussed. A press release was drafted by the Executive Committee of The Council and released through The Council Chairman to the press of Michigan (see page 238, March JMSMS).
- **Committee Reports.** The following were given consideration: (a) Advisory Committee to Michigan State Medical Assistants Society, meeting of January 31; (b) Study Committee on Basic Science Law, January 31; (c) Public Relations Committee, January 31 (and Subcommittee on Cinema, meeting of same date); (d) Cancer Control Committee, February 5; (e) Study Committee on Fees for Surgical Assistants, February 11; (f) Child Welfare Committee, February 11; (g) Advisory Committee to Selective Service System, January 14.
- **Report on the present dearth of applications** for medical school was discussed and further investigation ordered.



Council Chairman William Bromme, M.D., as "funprocessed" by his friend, C. L. Oden, M.D., of Muskegon.

- **Financial reports** were presented, studied and approved. Bills payable were presented and payment was authorized.
- **Committee Appointments:** H. M. Bishop, M.D., Saginaw, and J. Duane Miller, M.D., Grand Rapids, were added to Emergency Medical Service Committee; R. W. Teed, M.D., Ann Arbor, to Scientific Radio Committee; O. K. Engelke, M.D., Ann Arbor, to Legislative Committee.
- **Editor Wilfrid Haughey, M.D.,** recommended that brief "profiles" of the oldest practitioners (still in medical practice) in each county be published in JMSMS; also profiles of the Woman's Auxiliary President and the Michigan State Medical Assistants Society President. These recommendations were approved.
- **H. B. Zemmer, M.D.,** was designated as official MSMS representative to attend special meeting of Michigan Health Officers Association, Detroit, March 12; R. H. Baker, M.D., to attend Operating Room Nurse Conference, Detroit, March 12-13.
- **Blue Cross coverage terminates** when the doctor of medicine discharges the patient, according to information received from W. S. McNary, Executive Vice President, Michigan Hospital Service.
- **President R. J. Hubbell, M.D.** was authorized to attend the Ontario Medical Association meeting, Toronto, May 13-14, 1953, as official MSMS representative.
- **The name of Miss Emilie Sargent, R.N.,** Detroit, was approved for submission to the Governor as a nominee for the Michigan Crippled Children Commission.
- **Legal Counsel J. Joseph Herbert** presented written opinion on inquiry of a Detroit member re delegating to nurses the giving of intravenous infusions in hospitals.
- **Monthly report of Rheumatic Fever Coordinator** Leon DeVel, M.D. was presented and approved.
- **The purchase** of a flexible self-contained exhibit manufactured by Ivel Construction Corporation, was authorized.
- **A vote of thanks** was placed on the minutes to *Inside Michigan* magazine for its November 1952 article which featured the 1952 MSMS Annual Session.
- **The monthly report of Public Relations Coun-**

(Continued from Page 354)

E. R. SQUIBB & SONS 745 FIFTH AVENUE, NEW YORK 22, NEW YORK

Dear Doctor:

℞

Tolserol Tabs. 0.5 gram

Disp. #100

Sig: ~~One~~ tablet 3 to 5 times a day. Take after meals or with 1/3 glass of milk.

Usually Inadequate

This prescription is typical of many written for Tolserol Tablets*, as seen in a recent prescription survey.

Although some patients will respond to such low dosage, much better results can be obtained by following the recommended dosage: 1 to 3 grams, 3 to 5 times per day.

In accordance with this recommendation, the first dosage schedule for a patient could be:

℞

Tolserol Tabs. 0.5 gram

Disp. #100

Sig: ~~Two~~ tablets 3 to 5 times a day. Take after meals or with 1/3 glass of milk.

Better

Complete information on the use of Tolserol in muscle spasm of rheumatic disorders, neurologic disorders, and acute alcoholism is available from your Squibb Professional Service Representative.

Sincerely yours,

L. H. Ashe

L. H. Ashe, Manager
Professional Service Dept.

'TOLSEROL' IS A REGISTERED TRADEMARK

*Squibb 'Mephenesin'

HIGHLIGHTS OF THE COUNCIL

(Continued from Page 352)

sel H. W. Brenneman was presented and approved.

- **Discussion of matters of mutual interest** with State Health Commissioner, A. E. Heustis, M.D., included: (a) request to MSMS to review the budget of the Michigan Department of Health, which request was referred to the MSMS Finance Comm.; (b) a "Little Cabinet" has been set up by the Governor with Dr. Heustis representing the health agencies.
- **Beaumont Memorial.**—Report on the proposed contract for the building of the Beaumont Museum on Mackinac Island was presented by Past President Otto O. Beck, M.D., Birmingham.

AMA TAKES STAND ON DOCTOR-DRAFT LAW

The AMA Council on National Emergency Medical Service, meeting in Chicago a few weeks ago, adopted a position on certain aspects of the Doctor-Draft law in case it becomes necessary to endorse an extension of the law later on. The following recommendations were approved by the Board of Trustees, February 7:

1. Any proposed legislation should specifically extend the primary obligation of physicians now classified in Priorities I and II, who are not called into service before July 1, 1953, the current expiration date of the "Doctor Draft Law."

2. An amendment should be suggested to the basic Selective Service Act which would obligate physicians covered by the basic Act for military service without permitting deferments because of dependency or marital status.

3. The Association should advocate the adoption of legislation which would provide for the recognition of military service since September 1, 1939, with countries which were allies of the United States during World War II for purposes of the "Doctor Draft Law."

4. The present maximum age incorporated in the "Doctor Draft Law," i.e., registration, age 50; obligation to serve, age 51, should be preserved.

5. The present law should be amended to require registration of physicians, under age 50, who do not have reserve commissions in the medical corps of the Army, Navy or Air Force.

6. Physicians who have not served since September 16, 1940, should be called according to age—youngest men first, after physicians currently classified in Priorities I and II have been called up or deferred for reasons of essentiality or physical disability.

7. Physicians with military service since September 16, 1940, should be called according to past service—those with the least amount of service first, after physicians currently classified in Priorities I, II and III are called up or deferred for reasons of essentiality or physical disability.

8. No distinction should be made between service in World War II and service since June, 1950. For purposes of computing total service, military duty either as an enlisted man or officer, with the exception of time spent in a Navy V-12 or an Army Specialized Training Program should be included.

9. The present concept of deferring physicians regardless of their priority classification if they are essential to the national health, safety or interest should be continued.

10. Legislative authority to establish national and state medical advisory committees to the Selective Service System should be continued.

11. Any extension of the "Doctor Draft Law" should be limited to one year.

12. In an effort to insure a more equitable utilization

(Continued on Page 356)

Michigan State Medical Society

1953 Membership Card 1953

This is to certify that

_____ M.D.

is a member in good standing of the Michigan State Medical Society for 1953, and a member of a component County Medical Society. He is a graduate of an approved medical college and licensed by the State to practice medicine and surgery in all their branches.

Bring Card to Michigan Clinical Institute, March 11-12-13, 1953, and Annual Session, September 23-24-25, 1953.

Secretary

Rx — *to a new year of membership in the Michigan State Medical Society*

Clinical Course — *Michigan Clinical Institute (March 1953)*
MSMS Annual Session (September 1953)
Monthly JOURNAL MSMS
Postgraduate continuation courses
Projects of State Committees
Service of the MSMS Executive Office

Prognosis — *Professional protections and economic rewards*
Friendship and social affairs
Prestige of a great American professional organization.

President

Doctor: Your 1953 membership card welcomes you to a new year with the Michigan State Medical Society. The Michigan Clinical Institute, the September 23-24-25, 1953 Annual Session, THE JOURNAL each month, and many other services, such as protective and investigative committees, continuation courses, friendships and social affairs—all are yours as an MSMS member. These membership cards are being mailed as rapidly as the reports of membership dues are received from the County Medical Society Secretary. R. J. Hubbell, M.D., welcomes and urges every practitioner of medicine in Michigan to become active in a great American professional organization—the Michigan State Medical Society.



Breathing comfort as well as proper drainage and aeration of the sinuses during upper respiratory infections is assured by the swift and prolonged decongestive action of

NEO-SYNEPHRINE®

HYDROCHLORIDE

By shrinking the swollen mucosa, Neo-Synephrine permits drainage of purulent matter, restoring free breathing and relieving the headache caused by clogged passages.

RAPID AND PROLONGED ACTION Clearing of nasal obstruction follows within seconds after application of Neo-Synephrine and is unusually prolonged, so that comparatively few daily applications are necessary throughout the course of a cold.

WELL TOLERATED Neo-Synephrine is notable for its relative freedom from sting, virtual absence of compensatory congestion and also has been found relatively free from systemic side effects such as nervous excitation, cardiac reaction or insomnia even when tested on hypertensive, cardiac and hyperthyroid patients.[1]

NO APPRECIABLE INTERFERENCE WITH CILIARY ACTIVITY Neo-Synephrine not only restores nasal patency, but is compatible with ciliary action.

NO DROWSINESS Neo-Synephrine may be used by the ambulatory patient without danger of producing drowsiness or related sedative action. Applied topically, Neo-Synephrine confines its action to the upper respiratory passages.

SUPPLIED:

0.25% solution (plain), 1 oz., 4 oz. and 16 oz. bottles.

0.25% solution (aromatic), 1 oz. and 16 oz. bottles.

0.5% solution, 1 oz. bottles.

1% solution, 1 oz., 4 oz. and 16 oz. bottles.

0.5% water soluble jelly, ⅝ oz. tubes.

●

Neo-Synephrine, trademark reg. U.S. & Canada, brand of phenylephrine

●

1. Van Alyea, O. E., and Donnelly, Allen: *Arch. Otolaryng.*, 49:234, Feb., 1949.

WINTHROP-STEARNS INC. • New York 18, N. Y. • Windsor, Ont.

AMA TAKES STAND ON DOCTOR-DRAFT LAW

(Continued on Page 354)

of medical manpower by the Armed Services, the Association should recommend the establishment of a new position as Assistant Secretary of Defense for Health Affairs. It appears that the proper way to provide for this would be by an amendment to the National Security Act of 1947, as amended. In this connection, it is believed that a continuing concerted effort should be made to effect a lowering of the present ratio of 3.7 physicians per 1,000 troops.

It also was agreed that in the presentation of testimony to the Congress attention should be called to many inequitable situations currently being created by recalling physicians with prior service to military duty for the same period of time (24 months) as physicians who never have served. It was strongly recommended that a lesser period of service be established for those physicians who had at least 12 months of prior military duty since February 16, 1940.

With respect to the recommendation of the House of Delegates that consideration be given to the establishment of an equitable point system for the call-up of physicians, the Board of Trustees recommended that the matter be investigated further before arriving at a final decision.

HAVE YOU PAID YOUR DUES?

The American Medical Association Annual Session will be held in New York City from June 1 to June 5, 1953. The headquarters, scientific and technical exhibits, and meetings will be at the Grand Central Palace, 44th and Lexington Avenues.

To avoid the usual congestion at the registration windows and to save yourself trouble and delay, the American Medical Association is issuing advance-registration cards which will make it possible to quickly register instead of waiting in line to have your record checked with the membership roster.

To register it is necessary for you to have a pocket card showing your membership dues in the American Medical Association paid for 1953. If you have not already sent in your check to cover 1953 dues, we suggest that you do so at once, so as to give us an opportunity to forward the payment to the AMA in time to have the AMA issue a pocket card and also an advance-registration card to you.

Debilitating conditions, such as carcinoma, can and often do cause latent tuberculosis to become active.

* * *

The coexistence of pulmonary tuberculosis with malignant disease becomes commoner as the average age of the group in whom tuberculosis is found increases.

* * *

Given a patient with intermenstrual or post-menopausal bleeding of traumatic or spontaneous origin or persistent unexplainable discharge, always do a biopsy and/or a dilatation and curettage before definitive therapy is instituted.

MEDICAL MEETINGS AND CLINIC DAYS

A list of known medical meetings and clinic days, sponsored by county medical societies and other physicians' groups in Michigan, follows:

1953

May 7 Ingham County Medical Society's Clinic Day — Lansing

May 13 Wayne University Medical Alumni Clinic Day and Reunion — Hotel Fort Shelby, Detroit

May 21 The American College of Surgeons Annual Symposium on Trauma and Nutrition — Ann Arbor

June 1-5 AMA Annual Session — New York

June 2 Annual Clinic Day, Bon Secours Hospital — Detroit

June 19-20 Upper Peninsula Medical Society Annual Meeting — Escanaba

July 30-31 Annual Coller-Penberthy Medical Surgical Conference — Traverse City

August Third Annual Clinic, Central Michigan Committee, ACS Michigan Committee on Trauma, plus Michigan National Guard Medical Personnel, and Michigan Society of North Central Counties — Grayling

Sept. 22 Michigan Chapter, American College of Surgeons — Grand Rapids

Sept. 23-25 MSMS ANNUAL SESSION — Grand Rapids

Oct. 7 Clara Elizabeth Fund for Maternal Health and Genesee County Medical Society — Flint

Oct. 21 Michigan Cancer Conference — East Lansing

Autumn MSMS Postgraduate Extramural Courses — Statewide

Additions to this list of meetings are invited by the Editor of JMSMS, in order to make this monthly announcement complete and accurate.



Especially effective against gram-positive organisms resistant to other antibiotics.



Low toxicity; reported side effects infrequent.



Special "high-blood-level" coating.
ERYTHROCIN, *0.1-Gm. (100-mg.) Tablets, bottle of 25.*

ERYTHROCIN

TRADE MARK

(Erythromycin, Abbott)

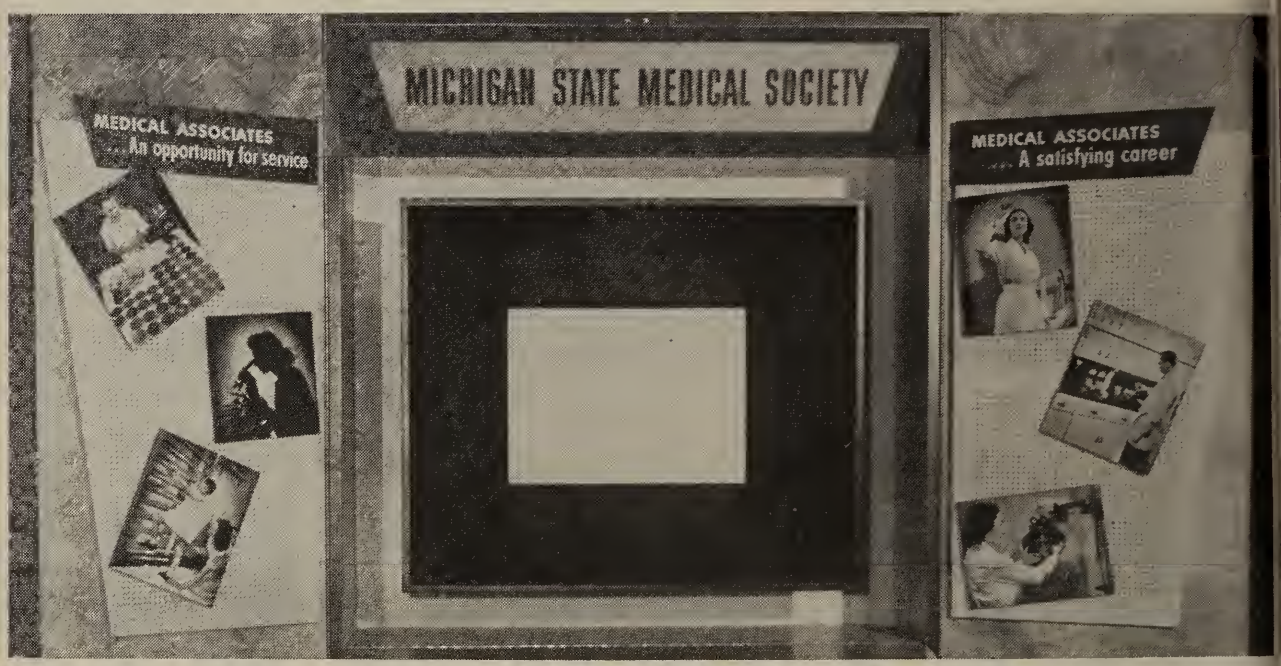
DICATIONS Pharyngitis, tonsillitis, scarlet fever, erysipelas, pneumococcic pneumonia, osteomyelitis, pyoderma. *Also other infections caused by organisms* susceptible to its action, including staphylococci, streptococci and pneumococci.

DOSAGE Total daily dose of 0.8 to 2 Gm., depending on severity of the infection. A total daily dose of 0.6 Gm. is often adequate in the treatment of pneumococcic pneumonia. *For the average adult* the initial dose is 0.2 Gm. to be followed by doses of 0.1 or 0.2 Gm. followed by doses in the same range every four to six hours. *For severely ill patients* doses up to 0.5 Gm. may be repeated at six-hour intervals if necessary. Satisfactory clinical response should appear in 24 to 48 hours if the causative organism is susceptible to ERYTHROCIN. Continue for 48 hours after temperature returns to normal. Abbott

1. McGuire et al. (1952), J. Antibiotics & Chemo., 2:281, June.
2. Heilman et al. (1952), Proc. Staff Meet. Mayo Clin., 27:385, July 16.
3. Haight and Finland (1952), New Eng. J. Med., 247:227, Aug. 14.

PR REPORT

Current Public Relations Activities of MSMS



Combining an attractive display and the use of motion pictures, the new Michigan State Medical Society exhibit was unveiled at the Michigan Clinical Institute in Detroit in March. The exhibit is available to County Medical Societies for fairs and local exhibitions.

MSMS Exhibit

An eye-catching exhibit stops the crowd while motion pictures tell your story.

That, in a nutshell, is the new Michigan State Medical Society exhibit which is available to County Medical Societies for use at county fairs and local exhibitions.

The MSMS exhibit fits into a space 10 feet wide and 3 to 5 feet deep. If your County Medical Society is offered a wider space, the balance of the width may be taken up with draperies.

An important element of any exhibit is the element of movement. This is present in the MSMS exhibit through the use of motion pictures. As noted in the photograph, the center portion of the exhibit contains a shadowbox. This shadowbox is a recessed motion picture screen. Behind the exhibit there is room for a motion picture projector. The projector is equipped with a special lens which throws the picture onto a mirror directly behind the shadowbox screen. The mirror in turn reflects the image on to the screen which is viewed by the exhibit audience.

Any 16 mm films may be used, but the three MSMS films, "To Save Your Life," "Lucky Junior" and "To Your Health" are recommended as they best tell the story of the medical profession in three areas of thought.

The motion picture sound apparatus is placed in the space below the shadowbox.

A second important element of the MSMS exhibit is its adaptability. Both the left and right wings of the exhibit are made of a special type of material containing horizontal and vertical holes. Pictures, shelves and models can be attached and arranged on these two panels to set the theme of the exhibit.

The public Relations Department of MSMS is developing other themes which might be utilized in the exhibit.

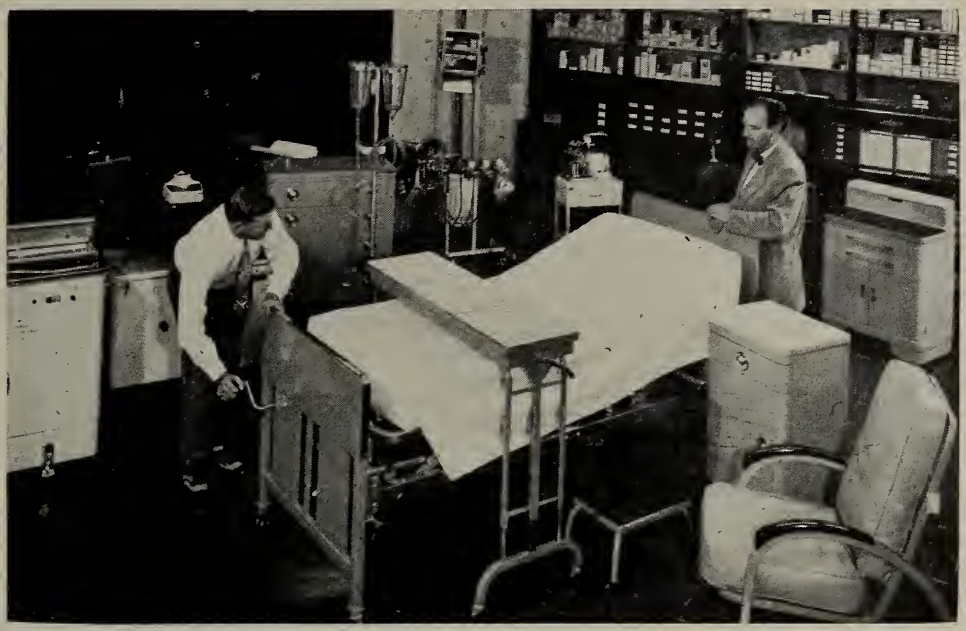
For further details on how to schedule the exhibit for your county fair or local exhibition, write the MSMS Public Relations Department in Lansing. Other information supplied by the Executive Office will include instructions on setting up the exhibit and recommended films and pamphlets to be used in conjunction with the exhibition.

Radio Package

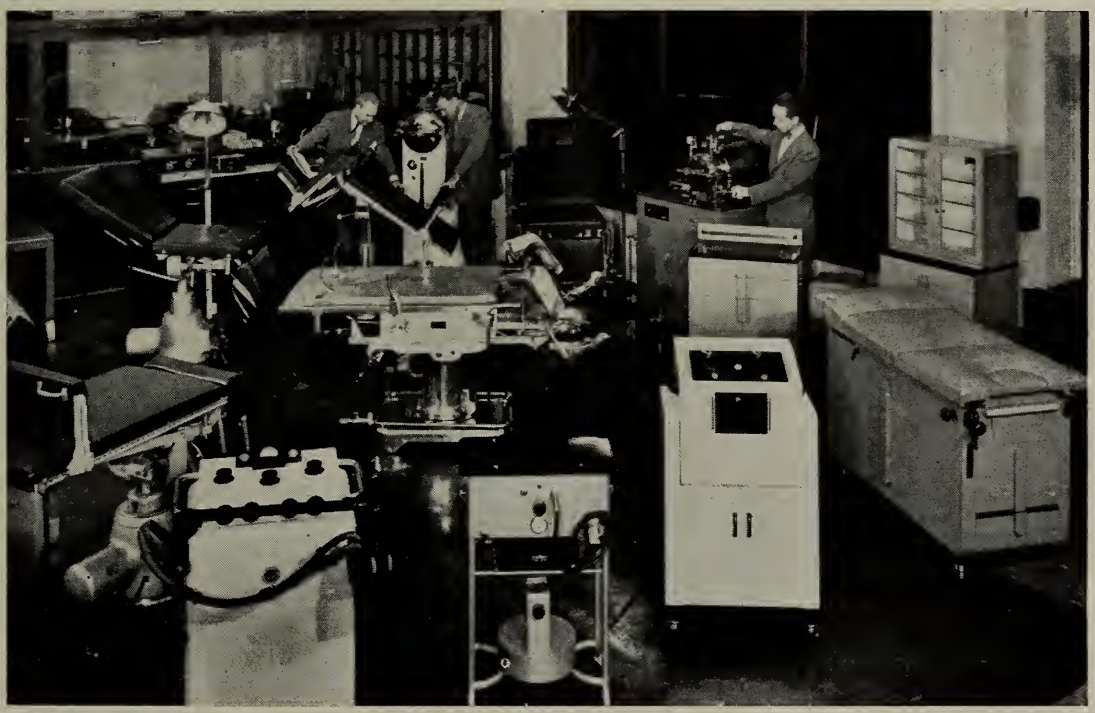
The Menominee County Medical Society introduced a new package radio series offered by MSMS. The 15-minute program was broadcast on Radio Station WMAW on March 9.

The package combines "Tell Me. Doctor" transcriptions plus discussion of a particular topic by a local doctor of medicine. "Tell Me Doctor" transcriptions are now available through the MSMS Executive Office in Lansing. A suggested 15-minute radio format is also available for use in presenting the series on a local level.

VISIT RANDOLPH



EVERYTHING YOU NEED ON DISPLAY



"For Finer Equipment"

Randolph Surgical

SUPPLY COMPANY

PHYSICIANS AND HOSPITAL SUPPLIES

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Michigan Foundation for Medical and Health Education, Inc.

Annual Reports

PRESIDENT'S ANNUAL REPORT

The accomplishments of the Foundation during the past year have necessarily been confined to the limits of our financial capacity and they have been held within these limits this year, as well as in the past years. To enumerate, they include co-sponsorships, student loans, student aid, responses to the various inquiries addressed to us and to the financial sponsorship and advisory service to the Michigan Rural Health Conference. The Rural Conference and the student loans are our two large expenditures.

The financial report will show that we have advanced to one prospective rural doctor $1,300 on his $1,500 loan and to another $200 on his $2,000 anticipated need. This makes a total of $1,500 advanced by the Foundation at the present time on the only two who have qualified, or to be plain and exact, on the only two applicants who have cared to qualify.

The Sixth Rural Health Conference was extended this year over the calendar year of 1952 to be held January 16 and 17 for the convenience of many of the participating groups and individuals. These January dates avoided many conflicts of Fall and early Winter experienced in the first four conferences. The exact cost of this last conference has not yet been determined but it is well within the appropriated limit. Press and radio were again most generous in publicizing this conference. The many co-sponsors found new ways this year to interest more people in this conference. Those concerned in the planning and management of this conference have been greatly gratified by the praise so generally expressed, ranging from a "good conference" to the "best yet."

In previous conferences the subjects selected have been general pertaining to hygiene, economics, insurance, protective measures, medical care, et cetera. This year it was found that the time had arrived when the discussion of particular diseases with the highest death rates was the popular desire. This was determined by a poll that reached more than 15,000 individuals and 4,100 community groups. The six discussion subjects thus selected were Polio, Cancer, Heart Disease, Rheumatic Fever, New Drugs and Their Uses, and Animal Diseases that Affect Man. The record attendance of 442 and the obvious interest shown in the several discussion groups as well as in the general assembly, was most gratifying to the planners of the conference.

The co-sponsors increased in number this year: 104 Michigan health organizations were thus listed on the programs, 318 paid attendants were credited to the annual banquet besides seventy-seven after-dinner guests. The speaker was the famous Dr. George F. Bond of Bat Cave, North Carolina, who has appeared in current periodicals and has received much recognition.

The Foundation's vice president, Burton R. Corbus, M.D., was the general presiding chairman of this conference and did a most admirable job. In a letter to the writer this week Doctor Corbus said. "I was very much impressed with the Rural Health Conference. The interest that was shown was quite heart warming, and I hope that we can, as a Foundation, continue our support." Mr. Eugene H. Wiard, executive secretary, Michigan Health Council, did a wonderful performance as secretary and developer of this conference. It does not seem that there could be a conference without his aid and participation, for he has become an intimate and personal part of the movement. The writer does not feel that he can compliment Mr. Wiard too highly on his outstanding performance.

This Foundation has supported the third, fourth, fifth and sixth Rural Health Conferences. The completed figures for expenditures for the third, fourth and fifth aggregate $5,933.71. This averages slightly less than $2,000 per conference as a cost provided by the Foundation.

On January 25, 1953, three Trustees of the Foundation, C. E. Umphrey, M.D., Mr. Gardner and Mr. Baxter, appeared in television on "The Court of Health." This show is promoted by the Michigan Health Council. The performance has attracted favorable comment concerning both acting and appeal to the video audience, to whom the cause of the Michigan Foundation for Medical and Health Education was further advanced.

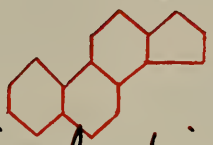
I am going to take the risk of boring you with figures in order to get before you the financial picture of this Foundation from its beginning. At the organization, September 19, 1945 we had the following: MSMS trust fund, bonds and cash, $23,519.61: Biddle estate estimated $28,953.46: pledges $19,000 with $5,000 paid in. It appeared then that we were starting business with $57,473.07 practically in hand, promises which suggested that we had a start of $71,473.07. Our pledges grew so that on January 15, 1946 we had $48,326.21 with paid in pledges of $33,451.31. This left unpaid pledges on that date of $14,675. This was our status within four months of our organization date.

There were some costs to organize and to do business and we were delayed in receiving the Biddle money because of stipulations in the will requiring that the distribution should not follow until the death of the last named beneficiary.

The yearly net worth of the Foundation from the beginning to the present is shown in the accompanying table:

(Continued on Page 364)

cortisone + SCHERING = Cortogen

h symbol SCHERING denotes leadership in
roid hormone  research and
nufacture -- including Cortogen
the most useful clinical forms.
r systemic therapy, use Cortogen
blets SCHERING or injection 
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ppears on each tablet and package
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CORTOGEN®

Acetate (cortisone acetate, Schering) Tablets, 5 mg. and 25 mg.;
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CORTOGEN

SCHERING

PRESIDENT'S ANNUAL REPORT

(Continued from Page 362)

Net Worth December 31, 1946,	$ 70,676.16
Net Worth December 31, 1947,	75,451.48
Net Worth December 24, 1948,	78,122.79
Net Worth December 23, 1949,	91,635.67
Net Worth December 22, 1950,	105,881.91
Net Worth December 24, 1951,	106,295.98
Net Worth December 26, 1952,	109,488.93

This table shows that our net worth has advanced a little each year. This growth, however, falls far short of the anticipations of the founders. We expected a rapid growth of an accumulation of funds which would at least reach seven figures. The doctor-support has been good but it has fallen far short to attract the probable lay support which would likely have followed a more substantial doctor contribution. There is no doubt that there are intended and probably there are a number of planned provisions for this Foundation to be realized in the future.

I wish to call to your attention again, an opportunity which has not been utilized except in a couple of instances. This Foundation is a vehicle to carry out a charity or a philanthropy without administrative cost to the donor. Aid by an individual to another individual is not deductible. The same aid, if done through the Foundation, and if it comes within the scope of the Foundation, may be handled to conform so that it is a deductible gift by the donor. Many doctors interested in this Foundation must have opportunities to advise friends and patients of this business opportunity.

Earl I. Carr, M.D.
Lansing

January 29, 1953

ANNUAL REPORT OF THE SECRETARY

The Secretary has executed the duties of his office according to the By-Laws and as provided in Robert's Rules of Order pursuant to the instructions of the members of the Board of Trustees, with the continued advice and guidance of President Carr and of Treasurer Gardner to whom the Secretary expresses gratitude and appreciation.

The Woman's Auxiliary to the Michigan State Medical Society was reminded on January 21, 1953 that interest in the amount of $20.00 on the $1,000 U. S. Government Bond (which the Woman's Auxiliary contributed to the Foundation in 1951) is due and payable.

Letters have been written to those who pledged amounts to the Foundation several years ago, seeking payment or a commitment. The following replied: H. R. Carstens, M.D., Chevy Chase, Md., acknowledged the pledge; L. G. Christian, M.D., Lansing stated that he had never signed a pledge; R. Earle Smith, M.D., Grand Rapids stated he was unable to pay. The balance did not reply.

The Biddle Fund of the Michigan Foundation for Medical and Health Education has been set up at the Michigan National Bank (Lansing Office) in accordance with instructions of the Foundation's Board of Trustees on January 24, 1952. The bonds in the Biddle Fund are:

Bonds	*Maturity*	*Present Book Value*
U. S. Bonds Series "F"	8/1/58	$ 797.00
U. S. Bonds Series "G" 2½%	8/1/58	$15,300.00
U. S. Bonds Series "G" 2½%	5/1/61	$10,000.00

The annual interest of these bonds approximates $640.00; the cumulative interest since the creation of the Biddle Fund (January 29, 1949) is $2,453.00.

These bonds are represented by safekeeping receipt A519, in the hands of the Secretary.

The Michigan Foundation for Medical and Health Education Lecture, to be given on the occasion of the 1953 Michigan Clinical Institute (with the speaker's expenses to be paid out of the Biddle Fund of the Foundation) will be presented by Michael M. Dacso, M.D., of New York City on March 13, 1953 in Detroit. Dr. Dacso's subject will be: "Management of the Chronic Disabling Diseases in the Aged."

A Biddle Lecture for a number of years has been presented in September on the occasion of the Michigan State Medical Society Annual Session with MSMS paying both the expenses and honorarium of the speaker. Does the Foundation wish to assume co-sponsorship of the Biddle Lecture in September and assume the expenses and honorarium of the Biddle Lecturer who appears at the MSMS Annual Session?

Fund-raising Possibilities.—Following instruction of the Board of Trustees at the January 24, 1952 meeting (Item 10 of the minutes), your Secretary dispatched letters to the following professional fund-raisers: American City Bureau, Chicago; Beaver Associates, Inc., Chicago; Ketchum, Inc., Pittsburgh; Pierce, Hedrich and Sherwood New York; Earl J. Smith and Associates, Detroit; Tamblyn and Brown Inc., New York; Ward Jenks and Associates, Chicago; Ward, Wells and Preshman, New York; Wells Organization, Cleveland.

Information received from these firms will be epitomized in a verbal report.

Respectfully submitted.
Wm. J. Burns,
Secretary

January 29, 1953

CONTROLS

When cotton was 3 cents a pound, wheat was 40 cents a bushel, and corn was 25 cents a bushel, the government adopted a price support program. With cotton selling for 33 cents, wheat for $2.35, and corn for $1.65, the depression born price support program is still in full force at a huge annual burden to the taxpayers.

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Heart Beats

SHORT CUTS TO A LONGER LIFE

"Housewives with heart disease have been called the largest segment of the working cardiac population. Since the woman with heart disease must in most cases go right on with her household chores, retraining is necessary to help her save time, motion and energy, thus lightening the load on her heart."



Mrs. Ruth C. Kettunen (seated at the ironing board above) of the Michigan State College Home Management Staff demonstrates one of the many "heart-saving" techniques which she is teaching in the Cardiac Housewife Classes being offered free to cardiac homemakers by the Michigan Heart Association. Sitting down to iron, lessens the strain placed on the heart by reducing the physical effort expended, Heart Association officials point out. Homemakers attending the classes learn practical ways of making their housekeeping simpler and easier by eliminating wasted energy and unnecessary steps. *No medical advice, diagnosis, treatment, or examination is given in the Cardiac Housewife Program.*

The Michigan Heart Association, with these thoughts in mind, embarked upon an extensive time and motion study of the daily household tasks of the homemaker. The entire project was undertaken with two important objectives: (1) to be of service to the Doctor of Medicine in prescribing relaxing work habits for his women cardiac patients and (2) to provide practical courses of instruction in work-simplification techniques without cost to the cardiac homemaker.

The initial study on the program, financed by the Michigan Heart Association through funds received in United campaigns, was carried out in Detroit by Mrs. Frances G. Sanderson, Chairman of the Home Economics Department at Wayne University. Working under medical guidance, and with cardiac homemakers, Mrs. Sanderson and her corps of assistants developed a course of instruction designed to fill the medical doctor's prescription of "take it easy" by showing the homemaker with a cardiac disorder how to save as much as 75 per cent of her walking, 75 per cent of her movements, and 60 per cent of her reaching while performing her daily household tasks.

Classes, based upon these studies, were then offered to cardiac homemakers in the Detroit area. Applications were accepted only upon the approval of the patient's attending Doctor of Medicine.

Early in 1951, the Michigan Heart Association provided funds to the School of Home Economics at Michigan State College to conduct a pilot study

(Continued on Page 368)

To the Doctors and Hospitals of Michigan . . .

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These families received Blue Cross-Blue Shield benefits totalling over 73 million dollars

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STATEMENT OF CONDITION

Report of Condition as of the Close of Business, December 31, 1952

MICHIGAN HOSPITAL SERVICE

ASSETS

Cash in Banks and Office	$ 4,239,807.51
United States Treasury and Defense Bonds	14,322,083.30
Accrued Interest	88,927.32
Subscription Fees—Receivable	184,293.48
Other Assets	294,859.47
Total Assets	$ 19,129,971.08

LIABILITIES AND RESERVES

Reserves for Payment for Services Rendered Subscribers (Including Unreported)	$ 9,004,172.36
Reserve for Unearned Subscription Fees	3,644,591.71
Reserve for Contingencies	6,149,243.79
Other Liabilities	331,963.22
Total Liabilities and Reserves	$ 19,129,971.08
Total Benefits Paid Since Inception	$206,347,035.71

MICHIGAN MEDICAL SERVICE

ASSETS

Cash in Banks and Office	$ 2,483,487.19
Real Estate—Home Office Property	638,375.53
United States Government and Government Guaranteed Bonds	6,984,810.64
Interest and Rents—Due and Accrued	65,954.77
Subscription Fees—Receivable	76,314.96
Funds Advanced for Veterans Administration	111,133.30
Other Assets	521,508.23
Total Assets	$ 10,881,584.62

LIABILITIES AND RESERVES

Reserve for Payments for Service Rendered Subscribers (Including Unreported)	$ 3,657,839.00
Reserve for Unearned Subscription Fees	1,707,957.72
Reserve for Contingencies	5,482,545.58
Other Liabilities	33,242.32
Total Liabilities and Reserves	$ 10,881,584.62
Total Benefits Paid Since Inception	$ 95,547,957.94

BLUE CROSS—BLUE SHIELD

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SHORT CUTS TO A LONGER LIFE

(Continued from Page 366)

along the lines used at Wayne University. The main purpose here, however, was to develop a program that would be usable in every community in Michigan.

Mrs. Ruth C. Kettunen of the College of Home Management staff was selected to direct this phase of the study. She also worked with women cardiac patients and under medical guidance. In a very few months Mrs. Kettunen, following a successful pattern developed at Wayne University, organized a course of instruction which could be used throughout the State utilizing the excellent services of the College Extension Service Agents in each county.

The classes are designed to benefit any economic level. The Michigan Heart Association does not endorse any products or equipment. Classroom instructors teach only principles, ideas and techniques of work-simplification. *No medical advice, treatment, diagnosis or examination is given to anyone in the classes.*

Some of the energy-saving ideas taught in the Cardiac Housewife Program include:

1. Sitting to do jobs whenever possible. Such things as washing dishes, preparing vegetables, mixing ingredients, ironing and dusting are excellent examples.
2. Arranging cupboards for maximum efficiency by placing seldom used utensils and dishes on the very high or very low shelves. Items used most often should be placed in the most convenient, or "arm-level" shelves.
3. Using two hands for dusting and putting away dishes.
4. Eliminating dish drying by scalding dishes and letting them drain dry.
5. An inexpensive, lightweight cart can also be a great step-saver. It may be used for transporting food from kitchen to table, setting and clearing the table, holding cleaning equipment and as a portable work table.

Since the initial series of classes in Wayne and Ingham Counties, the Cardiac Housewife Program has expanded to include Berrien, Kent, Genesee, Isabella, Grand Traverse, Benzie, Leelanau, Bay, Emmet and Charlevoix Counties. The year 1953 has witnessed another rapid expansion of the Cardiac Housewife Program so that more counties could be served. The "heart-saving" classes have been scheduled through September, 1953 in most of the above counties plus Saginaw Calhoun, Montcalm, Ionia, Allegan, Iosco, Arenac, Barry, Shiawassee, Charlevoix, Chippewa, Mackinac, Alger, Luce and Schoolcraft Counties.

Before the program is offered in any area of Michigan, the local County Medical Society is first contacted for its approval of the Program. Doctors of Medicine are urged to refer their patients to the free classes which are offered as a community service to doctor and patient by the Michigan Heart Association. If you are interested in further details on when the program will be scheduled in your area you are invited to contact the Michigan Heart Association, 4421 Woodward, Detroit 1, Michigan.

Michigan Registrations in Medicine

The following Doctors of Medicine have been granted licenses in Michigan. Numbers 20,204 to 20,220 inclusive:

By Endorsement.—Roger Alexander Smith *(North Carolina)*, William Edward Laupus *(National Board and Legalizing Examination)*, Joseph James Rowe *(New Jersey)*, Marvin Ross Bernard *(Indiana)*, Roman Fred Hauer *(Wisconsin)*, Robert Franklin Kandel *(National Board plus Legal Examination)*, Gerald Harry Zuckerman *(Colorado)*, Frank V. Sander, Jr. *(National Board plus Legal Examination)*, Kornelius Van Goor *(Maryland)*, Peter Mickael Agnone *(Pennsylvania)*, Graham Fraser Colquhoun *(Maine)*, Paul Rudolph Dumke *(Ohio)*, John David Trisler *(Ohio)*, David Charles Forrest *(Virginia)*.

By Examination.—Bernadette Barbara Stankey, Peter Elliott III, Sara Margaret Yager Alonso.

The following Michigan Doctors of Medicine were endorsed to the states named:

Irving D. Hellenga, Georgia; Linn A. Campbell, Illinois; Donald J. Ryan, Wisconsin; Alexander Grinstein, New York; Clifton Gustavus Myer, Tennessee; J. F. Ross, Ohio; Leo Eugene Robertson, Utah; M. J. Murray, California; Herschel Browns, Illinois; Sarah Catherine Linden, New York; Alan Reed Brown, North Carolina; Ira C. Walstrom, Washington; Irvine McQuarrie, California; Durwin Hall Brownell, Utah; Rex Ernest Buxton, Maryland; Fred Clinton Dalton, New York; Offlet Jackson Shore, Wyoming; Joseph E. Rosenfeld, Arizona; Herman Klein, Illinois; Robert Charles Peterson, New York; Donald Barrett Jury, California; Charles H. Flint, Arizona, Basic Science only; Harold P. Lynn, Nevada; Shirley Witham Martin, California; Nathan Eugene Martin, California; Leslie L. Lemak, Texas; Eldon Turley Perry, Pennsylvania; Arnald Michael Reeve, California; Fred Feigenson, California; Eugene J. P. Drouillard, Montana; Robert John McCandliss, Ohio.



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Sixth Annual Michigan Rural Health Conference Attracts Record Registration

Developed originally by MSMS in 1947, the Annual Michigan Rural Health Conference has grown to one of the outstanding meetings of its kind in the United States.

The Sixth Annual Conference, held this year at Kellogg Center on January 16 and 17, had a registration of more than 400 persons from all areas of the state. Well represented were delegates from County Medical Societies who contributed greatly in the deliberations of the panel discussions and who were largely responsible for what has been termed by many as the most successful Rural Health Conference program to date.

Health Subjects Selected By State-wide Survey Developed especially for this conference, a statewide survey of more than 4000 community groups polled a total in excess of 15,000 persons for subject material. Through this procedure, the people of Michigan were given the opportunity to name the six specific health subjects they would like to discuss and hear discussed at the conference.

Final tabulation of voting, based on a point system, identified the desired subjects as Polio, Heart Disease, Cancer, Rheumatic Fever, New Drugs and Their Uses and Animal Diseases that Affect Man.

Once the topics were selected, top resource persons were invited to discuss recent developments in each subject.

Doctors of Medicine Take Prominent Part Eight Michigan doctors served as top resource persons in the six panel discussion groups. Among those serving throughout the entire two-day meeting were: David G. Dickinson, M.D., Ann Arbor, Polio; Paul S. Barker, M.D., Ann Arbor, and Carleton Dean, M.D., Lansing, Heart; Leon DeVel, M.D., Grand Rapids, and Frank Van Schoick, M.D., Jackson, Rheumatic Fever; William L. Simpson, M.D., Detroit and Harry M. Nelson, M.D., Detroit, Cancer; William D. Robinson, M.D., Ann Arbor, New Drugs.

Burton R. Corbus, M.D., Grand Rapids, served as Assembly Chairman and E. I. Carr, M.D., Lansing, delivered the formal message from the sponsor at the opening assembly. A. C. Furstenberg, M.D. Ann Arbor, served as General Chairman for the conference planning and J. K. Altland, M.D. Lansing, served on the planning committee. J. S. DeTar, M.D., Milan, acted as chairman of the final assembly and presented the Andrew S. Brunk Award at the banquet.

The banquet address was presented by George F. Bond, M.D., of Bat Cave, N. C. He was formally introduced by R. J. Hubbell, M.D., President, MSMS, Kalamazoo.

Farm Theater Features Medical-Health Films Recently released medical and health films were featured at the Farm Theater, immediately following the Annual Banquet Friday night. The new AMA-RKO release "Your Doctor" featuring Dr. Bond, highlighted this session.

Health Exhibits Prove Popular Among the attractive health exhibits was the MSMS display of health advancement for 1953. Through a series of lighted panels controlled by the viewer, the exhibit presented an important message in two parts: (1) Your health is better today and (2) Less working time required to pay for it.

Many other attractive exhibits were displayed among which were the Michigan Heart Association's new movie shadow-box display and the Michigan Youth Commission's new exhibit, on public display for the first time at this conference.

Sponsorship List Further Expanded Following the First and Second Annual Michigan Rural Health Conferences, which were sponsored by MSMS, the Michigan Foundation for Medical & Health Education offered to provide the financial backing for the annual meeting with the provision that other Michigan health organizations be invited to act as co-sponsors. MSMS accepted the invitation and recommended that the Michigan Health Council be given the responsibility of planning and staging the conference.

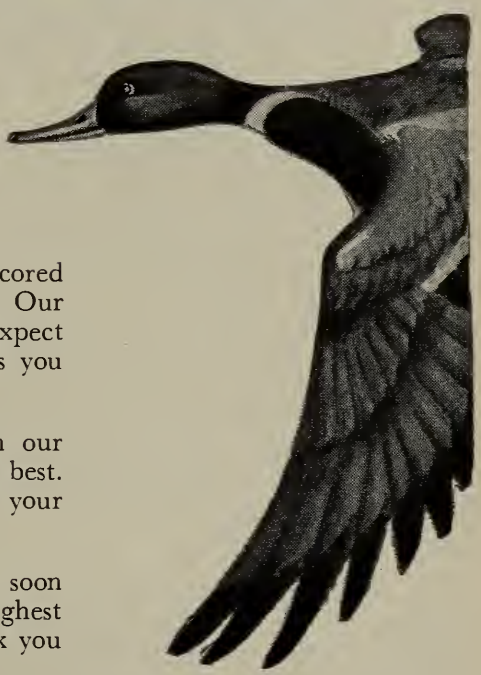
The Foundation has continued its sponsorship since that time and the list of co-sponsors has grown from twenty-five to 104 this year.

Final Report Available Soon A complete final report of the conference is now being prepared. The report will include the complete text of Dr. Bond's address and full information on the panel deliberations.

Copies of the report will be available free through Michigan Health Council, 706 N. Washington Avenue, Lansing, on request.



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County Secretaries Meet in Lansing, February 25



J. A. White, M.D.

Ideal weather greeted the Secretaries of Michigan's component county medical societies for their annual conference February 25. A spring-like day with sunshine and good driving attracted sixty-four registrants at Lansing.

J. A. White, M.D., Chairman of the County Secretaries during the past year, opened the meeting and introduced the various speakers: N. R. Moore, M.D., Bay City on "The Ballot Battle to Save Bay City General Hospital"; R. L. Novy, M.D.. Detroit and Louis H. Freye, Romeo, on "How to Report Cases to Michigan Medical Service"; H. E. Cope, M.D., Lansing on "Exchange of Scientific Programs Between County Medical Societies"; J. Joseph Herbert, LL.B., Manistique, on "Model Constitution and By-Laws for County Medical Societies"; E. A. Osius, M.D., Detroit, on "What About Basic Science Act?"; E. C. Swanson, M.D., Vassar, on "What About Medical Practice Act?"; and L. Fernald Foster. M.D. Bay City, on "Techniques—New and Old."

Honorable Wade Van Valkenburg of Kalamazoo, Speaker of the Michigan House of Representatives, presented an illuminating talk on "A Legislator's Problems." How laws are made, the membership of the "three" houses of the Legislature (including the "third house" composed of legislative representatives) was sketched by the Speaker who related many interesting and at times amusing anecdotes of the lawmakers' experience. This behind-the-scenes view of Michigan's lawmakers at work was the highlight of the day.

A special inspection tour of the MSMS "home" at 606 Townsend, Lansing, ended the days' session for the Secretaries of Michigan's component county medical societies.

L. Dell Henry, M.D., Ann Arbor long-time Secretary of the Washtenaw County Medical Society, was chosen Chairman of the County Secretaries Conference for the ensuing year.

Among the sixty-four registrants were included the six executive secretaries of county medical societies: Mrs. Lucy W. Bartlett, Muskegon; James Devereaux, Pontiac; Carl G. King, Saginaw; Miss Else Kolhede, Detroit; Mrs. Flora Mayer, Ann Arbor, and Mrs. Sara Warren, Flint.

Other registrants were:

County Secretaries—James E. Mahan, M.D., Allegan *(Allegan);* Harold Kessler, M.D., Alpena *(Alpena);* W. R. Birk, M.D., Hastings *(Barry);* L. Fernald Foster, Bay City *(Bay-Arenac-Iosco);* Robert W. Brown, M.D., Battle Creek *(Calhoun);* Edward H. Zwergel, M.D., Cassopolis *(Cass);* Thomas B. Mackie, M.D., Sault Ste. Marie *(Chippewa-Mackinac);* Donald G. Pike, M.D., Traverse City *(Grand Traverse-Leelanau-Benzie);* C. L. Hoogerland, M.D., Alma *(Gratiot-Isabella-Clare);* Arthur J. Stein, M.D., Hillsdale *(Hillsdale);* H. W. Porter, M.D., Jackson *(Jackson);* C. M. Schrier, M.D., Kalamazoo *(Kalamazoo);* Howard G. Benjamin, M.D., Grand Rapids *(Kent);* Ray M. Duffy, M.D., Pinckney *(Livingston);* Wm. A. Henkin, M.D., Mt. Clemens *(Macomb);* Samuel Osborn, M.D., Manistee *(Manistee);* A. S. Narotzky, M.D., Ishpeming *(Marquette-Alger);* J. A. White, M.D., Big Rapids *(Mecosta-Osceola-Lake);* W. S. Jones, Jr., M.D., Menominee *(Menominee);* Emily R. Hautau, M.D., Midland *(Midland);* Walter A. Meier, M.D., Monroe *(Monroe);* H. C. Tellman, M.D., Muskegon *(Muskegon);* A. R. Young, M.D., Pontiac *(Oakland);* G. A. Drake, M.D., Petoskey *(Northern Michigan);* C. H. Flint, M.D., Hart *(Oceana);* C. D. Selby, M.D., Port Huron *(St. Clair);* T. J. Dillon, M.D., Paw Paw *(Van Buren);* L. Dell Henry, M.D., Ann Arbor *(Washtenaw).*

County Presidents—W. G. Logan, M.D., Hastings *(Barry);* G. H. Rigterink, M.D., Kalamazoo *(Kalamazoo);* John A. Engels, M.D., Richmond *(Macomb);* O. R. MacKenzie, M.D., Walled Lake *(Oakland);* David P. Gage, M.D., Saginaw *(Saginaw);* E. T. Thieme, M.D., Ann Arbor *(Washtenaw).*

MSMS Council—Robert H. Baker, M.D., Pontiac; R. S. Breakey, M.D., Lansing; L. C. Harvie, M.D., Saginaw; R. J. Hubbell, M.D., Kalamazoo; W. S. Jones, M.D., Menominee; Ralph W. Shook, M.D., Kalamazoo.

Woman's Auxiliary Representatives—Mrs. Wm. Mackersie, Detroit; Mrs. W. S. Stinson, Bay City.

Michigan State Medical Assistants Society Representatives—Elizabeth E. Peck, Detroit; Lorine R. Nuechterlein, R.N., Saginaw; Margaret Schultz, Detroit.

Guests—H. F. Becker, M.D., Battle Creek; Frank V. Cargill, Chicago; George V. Conover, M.D., Flint; Carleton Dean, M.D., Lansing; J. Joseph Herbert, Manistique; Mrs. C. D. Selby, Port Huron; R. F. Staudacher, Chicago; Past President P. R. Urmston, Bay City.

Mrs. W. S. Stinson, Bay City, President-Elect of the Woman's Auxiliary to MSMS writes: "May I thank you for the courtesy and privilege of attending the MSMS County Secretaries Conference in Lansing on February 25. There is no doubt that the greater the knowledge and understanding of the activities of the Michigan State Medical Society which the Auxiliary and the membership have, the greater will be our scope of assistance to the Michigan State Medical Society and its membership."



they could stage their own symphony

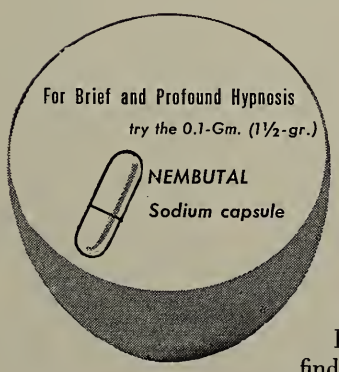
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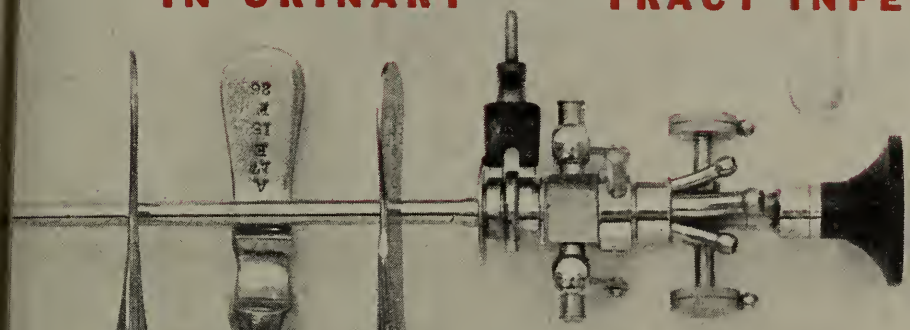
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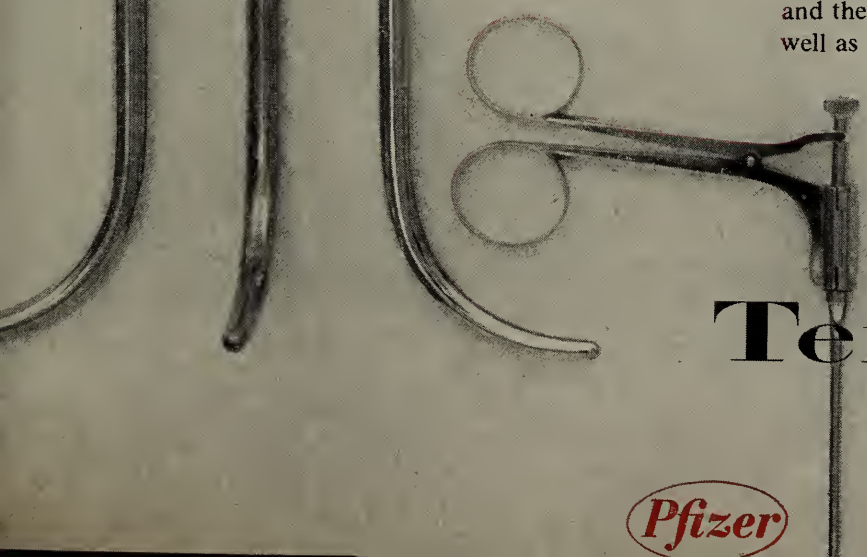
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1. Canad. M. A. J. 66:151 (Feb.) 1952.
2. J. Urol. 67:762 (May) 1952.
3. Ibid. 69:315 (Feb.) 1953.

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Michigan Health Council TV Shows

June 1, 1952 through March 1, 1953

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1952

Date	Title	Names
June 1	"Areas of Co-operation in Health"	Otto O. Beck, M.D., President, MSMS J. K. Altland, M.D., Michigan Department of Health Glen Fausey, President, Michigan Hospital Association
June 8	"Opportunities in the Nursing Profession in Michigan"	Miss Lucy Germain, President, Michigan Nursing Center Association Mrs. Grace Wulff, Detroit Council on Community Nursing Jean Gibbs and Joan Engquist, Nurses
June 15	"Summer Health Hazards"	Arthur E. Schiller, M.D., Dermatologist, Detroit Lt. C. F. VanBlankensteyn, Commanding Officer, Safety and Traffic Bureau, Michigan State Police, East Lansing
June 22	No show due to coast-to-coast telethon with Crosby and Hope running through our regular time.	
June 29	"Activities of the Dearborn Health Council"	Mrs. Mary Finnson, Dearborn Health Department Harold Lynch, D.D.S., Dearborn Roscoe Simmons, Dearborn Public Schools Mrs. Muriel Binder, Dearborn Health Council Miss Atishun, Tuberculosis patient
July 6	"New Hope for Hearts"	Frederic Johnson, M.D., Wayne University College of Medicine Mrs. Hugh Wilson, Vice President, Michigan Heart Association
July 13	"Summer Sanitation"	John Hepler, Director of Engineering, Michigan Department of Health Morton S. Hilbert, Public Health Engineer, Wayne County Health Department, Eloise
July 20	"Farm Safety Week"	Wm. Buckinger, Farm Safety Engineer, Detroit Edison Co. Robert Richards, Past President Michigan Safety Conference
July 27	"Faith in Your Pharmacist"	J. N. Mandiberg, M.D., Detroit general practitioner David Karp, Vice President, Michigan Pharmaceutical Association Henry Maicki, Executive Committee, Michigan Pharmaceutical Association
Aug. 3	"Polio in Michigan"	Thomas Francis, Jr., M.D., School of Public Health, University of Michigan Mrs. Robert Langford, Chairman, Local Committee of National Foundation for Infantile Paralysis
Aug. 10	"How the Automobile Industry Safeguards the Health of Its Workers"	E. A. Irvin, M.D., Medical Director, Cadillac Motor Co., Division of General Motors Corporation Clifford H. Keene, M.D., Medical Director, Kaiser-Frazer Corporation Ralph G. Smith, Chief Chemist, Department of Industrial Hygiene, Detroit Department of Health W. A. Dawson, M.D., Assistant Physician, Rouge Plant, Ford Motor Company
Aug. 17	"Activities of the Garden City Health Council"	W. H. Kern, M.D., General Practitioner, Garden City Beatrice West, Member, Garden City Health Council and Public School Teacher
Aug. 24	"The Mentally Retarded Child"	Lee Trumble, President, Coldwater Parents Association Harold McKercher, President, Michigan Association of Parents and Friends of Mentally Retarded Children Raymond Mulchahay, Director, Coldwater State Home and Training School
Aug. 31	"Guard Your Heart" Due to Labor Day week-end, entire time was devoted to Heart Association film	

Sept. 7	"Better Schools Make Better Communities"	E. Dale Kennedy, D.E., Assistant Executive Secretary, M.E.A. Charles E. Brake, D.E., Deputy Superintendent of Schools, Wayne County
Sept. 14	"Advances in Medicine"	L. Fernald Foster, M.D., Secretary, MSMS Arch Walls, M.D., Chairman, Arrangements Committee, MSMS
Sept. 21	"Socio-Economic Aspects of Medicine"	G. W. Slagle, M.D., Councilor, MSMS R. W. Shook, M.D., Councilor, MSMS W. S. Jones, M.D., Chairman, Finance Committee
Sept. 28	"Women at Work—In Medicine"	Mrs. William Mackersie, President, Woman's Auxiliary, MSMS Mrs. A. E. Milford, First Vice President and Public Relations Chairman, Woman's Auxiliary
Oct. 5	No Production—cancelled by station due to unavoidable commitments	
Oct. 12	"Work Being Done by the Michigan Public Health Association"	Oscar Stryker, M.D., Director, Macomb County Health Department Miss Patricia Walsh, R.N., President, Michigan Public Health Association LaRue Miller, Secretary, Michigan Public Health Association
Oct. 19	"Contributions to Community Made by Wayne University College of Medicine"	William L. Simpson, M.D., Scientific Director, Detroit Institute of Cancer Research Gordon H. Scott, Ph.D., Dean, College of Medicine, Wayne University Albert D. Ruedemann, M.D., President, Kresge Eye Institute; Professor of Ophthalmology, Wayne University
Oct. 26	"Organized Attack on Cerebral Palsy in Michigan"	Clarence H. Eisman, M.D., Deputy Director, Crippled Children Commission Earl J. Hudson, State Director, United Cerebral Palsy Association of Michigan Dale Renault, Executive Secretary, United Cerebral Palsy Association of Michigan
Nov. 2	"Diabetic Detection"	Walter L. Anderson, M.D., Chairman, Diabetes Detection Committee, Wayne County Medical Society George C. Thosteson, M.D., Council-member, American Diabetes Association
Nov. 9	"Activities of Michigan Farm Bureau"	Mrs. Harry Whittaker, Chairman, Michigan Farm Bureau Women; Member, Board of Directors and Board Member, Michigan Hospital Service Mrs. Carl Buskirk, Member, Women's Committee, Van Buren Farm Bureau Keith Tanner, Director, Field Services, Michigan Farm Bureau
Nov. 16	"What You Should Know About Cancer"	Clifford H. Keene, M.D., Co-chairman, Cancer Control Committee, MSMS Harry M. Nelson, M.D., President, American Cancer Society Albert E. Heustis, M.D., State Health Commissioner, Michigan Department of Health
Nov. 23	"The Nurse in Industry"	Mrs. Thelma Durham, President, National Association of Industrial Nurses, Memphis, Tennessee Miss Helen Decoursey, R.N., Kelsey-Hayes Main Plant, Detroit Miss Marion Casterdale, R.N., Upjohn Co., Kalamazoo Mrs. Beulah Sattley, R.N., Chrysler Corporation, Detroit
Nov. 30	"Center Line Community Health Council"	Mrs. Evelyn Zeiss, President, Center Line School Health Council Clarence Crothers, Superintendent, Center Line Public Schools Mrs. Martha Scharf, Past President, Center Line School Health Council
Dec. 7	"Seal of Faith"	Frank G. Schemanske, Judge, Wayne County Recorders Court; Member, Board of Directors, Tuberculosis and Health Society, Wayne County David Littlejohn, M.D., Director, Wayne County Health Department; Member, Board of Trustees, Michigan Tuberculosis Association Norbert Reinstein, Director of Health Education, Tuberculosis and Health Society of Wayne County

Dec. 14	"Detroit's Holiday Safety Campaign"	Alger F. Malo, Director, Department of Streets and Traffic Louis J. Berg, Inspector, Stationary Traffic and Traffic Safety Bureau Donald Slutz, Managing Director, Traffic Safety Association of Detroit
Dec. 21	"Childhood's Greatest Enemy"	B. I. Johnstone, M.D., Chairman, Rheumatic Fever Control Committee, Wayne County Medical Society Manes Hecht, M.D., Rheumatic Fever Research Investigator, Children's Hospital, Detroit; Member, Wayne County Medical Society—Rheumatic Fever Control Committee
Dec. 28	"Preface to a Life" (film)	
1953		
Jan. 4	"Michigan Rural Health Conference"	Paul Miller, Assistant Professor of Sociology and Anthropology, Michigan State College; co-chairman of discussion activities for Rural Health Conference E. H. Wiard, Secretary, Rural Health Conference; Executive Secretary, Michigan Health Council
Jan. 11	"Weight Reduction Through Diet"	Dena Cederquist, Ph.D., Associate Professor, Department of Foods and Nutrition, School of Home Economics, Michigan State College Miss Jenny Day, formerly Dietitian, University Hospital, Ann Arbor; presently Nutrition Specialist for Extension Services, Michigan State College
Jan. 18	"Responsibilities of Your Sanitary Engineer"	C. H. Bracy, Assistant Chief of Bureau of Marketing and Enforcement, State Department of Agriculture C. J. Turney, Director, Bureau of Sanitation for Lansing-Ingham County Health Department
Jan. 25	"Michigan Foundation for Medical and Health Education, Inc."	C. E. Umphrey, M.D., Member, Board of Trustees, Michigan Foundation H. H. Gardner, Treasurer, Michigan Foundation for Medical and Health Education C. Stewart Baxter, Member, Board of Trustees, Michigan Foundation
Feb. 1	"To Save Your Life" (film)	
Feb. 8	"The Planned Parenthood Movement"	Mrs. Francis Schilling, Past President, Michigan League for Planned Parenthood Three representatives of foreign countries
Feb. 15	"Influenza and the Cold"	O. K. Engelke, M.D., Director, Washtenaw County Health Department F. P. Rhoades, M.D., General Practitioner, Detroit
Feb. 22	"Rehabilitation"	Kathryn J. McMorrow, M.D., Psychiatrist, Henry Ford Hospital
Mar. 1	"Goiter Control"	J. K. Altland, M.D., Michigan Department of Health B. E. Brush, M.D., Iodized Salt Committee, MSMS

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The JOURNAL

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Does the Law Seal the Doctor's Mouth?

By J. Joseph Herbert, LL.B.
Manistique, Michigan

FOUR HUNDRED years before Christ, during the glorious Periclean Age, the celebrated Greek physician, Hippocrates, enunciated in form of a remarkable Oath the professional ideals of his calling. This ancient avowal has come down through the centuries so consistent with contemporary ethical concepts that even today most every doctor at the time of his graduation from medical school takes the Oath as the code of honor of his profession. Its last covenant pledges that:

"Whatever, in connection with my professional practice or not in connection with it, I see or hear, in the life of man, which ought not to be spoken abroad, I will not divulge, as reckoning that all such should be kept secret."[1]

The secrecy so promised has had such general recognition by doctors and laymen alike that our social institutions have often found it difficult to avoid its ethical impact. Nevertheless, this precept of relatively high moral value has been forced to yield in considerable measure when it collided with other ethical concepts regarded by society as transcendent for the *summun bonum*. To what extent the private engagement arising from a code of honor should yield to the demands of legal and social justice in a democracy has been and is yet being debated by our courts, legislative bodies and the medical profession itself. And its application to the rights of man reflects generally the concern which society has in choosing a course which is most likely to advance the ethical and material welfare of the greatest number. In this instance as in others the law has followed social attitudes quite closely in principle, if not so closely in point of time.

The American Medical Association in recognition of social imperatives has relaxed the sweeping quality of the Oath in its published *Principles of Medical Ethics,* which contain the following pertinent provisions:

"The confidences concerning individual or domestic life entrusted by a patient to a physician and the defects of disposition or flaws of character observed in patients during medical attendance should be held as a trust and should never be revealed except when imperatively required by the laws of the state. There are occasions, however, when a physician must determine whether or not his duty to society requires him to take definite action to protect a healthy individual from becoming infected, because the physician has knowledge, obtained through the confidences entrusted to him as a physician, of a communicable disease to which the healthy individual is about to be exposed. In such a case, the physician should act as he would desire another to act toward one of his own family under like circumstances. Before he determines his course, the physician should know the civil law of his commonwealth concerning privileged communications.

A physician should give timely notice of dangerous manifestations of the disease to the friends of the patient. He should neither exaggerate nor minimize the gravity of the patient's condition. He should assure himself that the patient or his friends have such knowledge of the patient's condition as will serve the best interests of the patient and the family."[2]

It is to be noted from the quoted passages that the profession makes specific exceptions to the pledge of secrecy in cases of communicable diseases, and where the law makes no provisions for

Mr. Herbert is Legal Counsel for the Michigan State Medical Society.

1. *Perry* v *Hannagan,* 257 Mich. 120, 122.

2. Principles of Medical Ethics of the American Medical Association, Chapter II, Sections 1 and 2.

privileged communications or limits the application of the rule. Moreover, there is a positive mandate that the physician give timely notice to friends of the patient of "dangerous manifestations of the disease." Obviously, the profession in its ethical attitude to confidential communications has "rolled with the punch" of modern social demands.

Although this short discussion attempts to relate the attitude of the law to the physician's code of honor, it is not intended as a treatise on the procedural law of privileged communications or on the substantive law concerned with unauthorized disclosures by physicians out of court. Rather, its purpose is to point out the extent to which the original concept of full secrecy has been relaxed by the law of Michigan within three areas, viz., in proofs from the witness stand, in daily life, and in regulatory legislation.

Disclosures On The Witness Stand

Strictly speaking, the expression "privileged communication" relates to a rule essentially one of evidence, applicable to proofs from the witness stand, and not to disclosures made outside of judicial or quasi judicial tribunals. The so-called privilege allows a patient in court, on formal objection, to seal the mouth of his physician against testifying to certain matters which the witness learned in his professional capacity. This "privilege" depends solely on statute and has no counterpart at common law.[3]

Interestingly enough, the struggle between the doctor's code of honor and the demands of justice arose not from disclosures by physicians on the street, in club rooms, or medical journals, but rather when doctors were on the witness stand and the court was trying to learn the truth so as to administer justice.

In 1776, at the notable bigamy trial of the Duchess of Kingston before the House of Lords,[4] the matter was completely settled for the common law of England. Mr. Hawkins, a physician who had attended the duchess and her alleged husband, was asked on the stand: "Do you know from the parties of any marriage between them?" Ans: "I do not know how far anything that has come before me in a confidential trust in my profession should be disclosed, consistent with my professional honor." Whereupon the Lord Chief Justice Mansfield in measured words replied:

> "If all your lordships will acquiesce, Mr. Hawkins will understand that it is your judgment and opinion that a surgeon has no privilege, where it is a material question in a civil or criminal cause to know whether parties were married or whether a child was born, to say that this introduction to the parties was in the course of his profession and in that way he came to the knowledge of it*** If a surgeon was voluntarily to reveal these secrets, to be sure, he would be guilty of a breach of honor and of great indiscretion; but to give that information in a court of justice, which by the law of the land he is bound to do, will never be imputed to him as any indiscretion whatever."

To this day in England there is no privilege between physician and patient, and the physician is compelled by law to testify to confidential matters relating to his patient. This common law rule would probably still be the law in the United States but for the fact that in 1828 the State of New York adopted a novel statute, establishing a physician-patient "privilege." Thereafter, thirty-four American jurisdictions, including Michigan, adopted similar acts.[5] Although these statutes are not uniform in wording, and now contain material variations, in essence they provide that physicians and surgeons may not, without the consent of the patient, be examined as to any information acquired in attending the patient, which was necessary to prescribing or acting as a physician or surgeon. On the other hand, seventeen states, including all of those of New England, have adhered to the English common law and do not recognize the privilege.[6]

Perhaps the best argument in support of the privilege statute was advanced by the *Commissioners On Revision Of The Statutes Of New York* in 1836.

> "The ground on which communications to counsel are privileged, is the supposed necessity of a full knowledge of the facts, to advise correctly, and to prepare for the proper defence or prosecution of a suit. But surely the necessity of consulting a medical adviser, when life itself may be in jeopardy, is still stronger. And unless such consultations are privileged, men will be incidentally punished by being obliged to suffer the consequences of injuries without relief from the medical art,

3. *Campau* v *North,* 39 Mich. 606.
4. Duchess of Kingston's Trial, 20 HOW. ST. TR. 573.
5. Alaska, Arizona, Arkansas, California, Colorado, District of Columbia, Hawaii, Iowa, Idaho, Indiana, Kansas, Kentucky, Michigan, Missouri, Minnesota, Montana, Nebraska, Nevada, New Mexico, North Carolina, North Dakota, Oklahoma, Oregon, Ohio, Pennsylvania, Philippine Islands, Puerto Rico, South Dakota, Utah, Virgin Islands, Washington, West Virginia, Wyoming and Wisconsin.
6. Alabama, Connecticut, Delaware, Florida, Georgia, Illinois, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, Rhode Island, South Carolina, Tennesee, Texas, Vermont, and Virginia.

and without conviction of any offence. Besides, in such cases, during the struggle between legal duty on the one hand, and professional honor on the other, the latter, aided by a strong sense of the injustice and inhumanity of the rule, will, in most cases, furnish a temptation to the perversion or concealment of truth, too strong for human resistance."

It is to be noted, however, that the policy supporting the physician-patient privilege has been severely criticized by such scholarly writers as Wigmore,[7] Chafee[8] and Purrington.[9] Other lawyers have found serious fault with the rule.

In Wigmore's polemic against the privilege he lays down four postulates to test its validity:[10] (1) The communication must originate in a confidence; (2) the inviolability of that confidence must be vital to the attainment of the problems of the relation of physician and patient; (3) the relation must be one that should be fostered; (4) the expected injury to the relation, through disclosures, must be greater than the expected benefit to justice. He insists that if any one of these conditions is not satisfied it leaves the privilege without support. As to the first, he argues that only in rare instances are facts communicated to the physician confidential in a real sense, and that, excepting venereal disease and criminal abortions, most of one's ailments are immediately disclosed and discussed with the doctor as well as friends. As to the second, he points out that people are not deterred from seeking medical help because of the possibility of disclosure in court, and notes that in states where the privilege does not exist there is no reluctance on the part of the public to obtain medical aid. He concedes that the physician-patient relation should be fostered, hence the third postulate is satisfied. But, as to the fourth, he emphatically denies that its requirement is met. He urges that injury to justice by repression of facts of corporal injury and disease is a hundredfold greater than any injury that might be done by the disclosure. He declares that ninety-nine per cent of litigation in which the privilege is invoked consists of three classes of cases: actions for personal injuries, actions on policies of life insurance where the deceased's misrepresentations of his health are involved, and testamentary actions where the testator's mental capacity is disputed. He then asks the medical profession to reflect that the principal instances in which justice asks for disclosures are in personal injury and life and accident insurance, cases which the patient himself has voluntarily brought into court. Hence, the physician has no reason to reproach himself with the consequences that justice requires.

The most cogent judicial argument in opposition to the rule is to be found in *Maine* v. *Maryland Casualty Co.*, 172 Wis. 350, 178 N.W. 749, in which Justice Owen in a dissenting opinion said:

"The rule did not obtain at common law. It had its origin in the State of New York, and has been adopted by approximately one-half of the States of this country. It is said that it was enacted for the purpose of encouraging patients to disclose fully their ailments to their attending physicians without apprehension that their statements so made could be disclosed upon the witness stand to their humiliation and disgrace. As compared with the innumerable ailments to which the human flesh is heir, those which bring shame or disgrace to the sufferer are inconsiderable. Of those so afflicted who consult physicians but an inconsequential proportion are restrained from complete disclosure by apprehension of enforced publicity of shameful secrets. When we realize that but an insignificant segment of society requires protection of this nature, well may we wonder whether the shield designed for their benefit should be made so broad and ample as to constitute an insuperable barrier to the attainment of justice by the heirs and representatives of those who do not need such protection.

Ordinarily bodily affliction and disease are attended with neither shame nor disgrace. The character of one's ailment is not usually a secret. It is generally known to one's neighbors, friends, and acquaintances. In all the range of human affliction one can think of but one class of diseases that he would hide from his friends and neighbors, and that is venereal diseases. No other diseases, nor class of diseases, bring humiliation or shame or disgrace to the sufferer. He who has acquired venereal disease by clandestine liaison has scant claim upon legislative consideration for protection from the shame which he has deliberately invited. In the last analysis, therefore, this statute must be said to have been enacted to save from shame and disgrace those who by their own acts have forfeited their honor. If this could be done without at the same time working injustice to the innocent and the pure, the purpose might be generous and praiseworthy. But where the innocent are made to suffer to shield the wicked and the guilty from the publicity of their own misconduct, the cost of generous consideration becomes too great.

Taking society as a whole, this statute cheats rather than promotes justice. It suppresses rather than re-

7. Wigmore on Evidence (3d Ed.), Sections 2380-2391.
8. Zechariah Chafee, Jr.: Privileged Communications: Is Justice Served or Obstructed by Closing the Doctor's Mouth on the Witness Stand?, 52 Yale Law Journal 607.
9. Purrington: An Abused Privilege, 6 Col. L. Rev. 388.
10. Wigmore on Evidence (3d Ed.), Sections 2285 and 2380a.

veals truth. This case furnishes a splendid illustration of its consequences. Here a poor widow is turned out of court, unable to recover on a contract made by her deceased husband for her benefit because this statute closes the mouth of his attending physician. The same result must follow in any case for the recovery of damages for death caused by wrongful act, where the testimony of the attending physician is necessary to establish the causal relation between the injury and the death. The innocent should not be thus deprived of justice and made to pay the cost of the protection which this statute would afford to those who have forfeited all right to protection.

The centuries of experience during which the common law was developed did not give rise to this rule. * * * Well may this statute receive legislative reconsideration, and if it be still thought desirable to afford protection to those who have but scant claim upon the considertion of society, then let it be so framed that such protection can be extended without working hardship and injustice to the innocent and the pure."

Be arguments pro and con what they may, Michigan adopted the rule by statute in 1846,[11] although the provisos which now appear in the act to remove its serious strictures in personal injury actions (including workmen's compensation cases), malpractice suits and will contests were not added until 1909 and 1915.

The present form of the statute is as follows:

"No person duly authorized to practice medicine or surgery shall be allowed to disclose any information which he may have acquired in attending any patient in his professional character, and which information was necessary to enable him to prescribe for such patient as a physician, or to do any act for him as a surgeon: Provided, however, that in case such patient shall bring an action against any defendant to recover for any personal injuries, or for any malpractice, if such plaintiff shall produce any physician as a witness in his own behalf, who has treated him for such injury, or for any disease or condition, with reference to which such malpractice is alleged, he shall be deemed to have waived the privilege hereinbefore provided for, as to any or all other physicians, who may have treated him for such injuries, disease or condition: Provided, further, that after the decease of such patient, in a contest upon the question of admitting the will of such patient to probate, the heirs at law of such patient, whether proponents or contestants of his will, shall be deemed to be personal representatives of such deceased patient for the purpose of waiving the privilege hereinbefore created."[12]

The privilege so set out is, of course, no broader than the plain provisions of the statute reasonably construed by the courts. Nevertheless, under Michigan law there are many important situations, even under the statute, where the seal is not applied to the doctor's lips.

First of all, it must be borne in mind that the privilege is one personal to the patient, and does not belong to the physician.[13] Accordingly, the physician cannot claim it if the patient abandons it. His abandonment may be express or implied. Our court has held, for example, that unless the privilege is asserted by or for the patient through formal objection before the doctor testifies, it ceases to be a privilege, and the doctor cannot insist on remaining silent.[14]

The patient has been deemed to have waived the privilege under other circumstances, as when she voluntarily took the stand and testified to matters within the privilege. The court thereupon permitted her physician to testify on subjects otherwise regarded as confidential.[15] And if a patient furnishes statements in a proof of death containing confidential matter which would be privileged under the statute, he waives his statutory privilege to that extent, and his physician may testify on the same subject.[16]

Personal injury and malpractice suits, including workmen's compensation cases, constitute possibly ninety per cent of all those in which the privilege would ordinarily be invoked. However, in such litigation the express language of the statute virtually forces plaintiffs to abandon the privilege, for, as a practical matter, such plaintiffs almost invariably find it necessary to support their claims by medical testimony, whereupon the defense is free to examine and cross-examine doctors as to matters otherwise within the privilege.

In will contests, wherein the mental and physical health of the testator is an issue, there is seldom any question of privilege, for under the statute if the heirs as proponents do not choose to waive it, then heirs as contestants of the will certainly may and do.

But even when the patient does not expressly or impliedly waive his privilege, many situations arise in which the law will not seal the lips of the medical witness. The phrasing of the statute expressly limits its application to information acquired by the doctor "in attending any patient

11. Sec. 86 R.S. '46 Ch. 102.
12. C.L. 1948 617.62; M.S.A. 27.911.
13. *Fraser* v *Jennison*, 42 Mich. 206; *Storrs* v *Scougale*, 48 Mich. 387; *Lincoln* v *City of Detroit*, 101 Mich. 245.
14. *Briesenmeister* v *Knights of Pythias*, 81 Mich. 525; *Lincoln* v *City of Detroit* supra.
15. *People* v *Kayne*, 268 Mich. 186.
16. *Briesenmeister* v *Knights of Pythias* supra.

in his professional character, and which information was necessary to enable him to prescribe for such patient as a physician, or to do any act for him as a surgeon." So, if the doctor is engaged by another merely to examine the patient as to his physical or mental condition, and not to treat him, the information he gains in so doing is not privileged. And this is true when the patient is aware that he is being examined pursuant to court order or statutory right at the request of his adversary, the prosecuting attorney, or at the instance of the court itself. Thus, in a prosecution for rape, where the defendant voluntarily permitted examination of his shoulder, the physician was permitted to testify that he found bruises thereon.[17] In another rape case, the prisoner voluntarily submitted to an examination in jail by a physician, at the instance of the prosecutor. The examining physician was permitted to testify as to whether or not the "patient" was suffering from a venereal disease.[18]

Questions have frequently arisen whether the particular observations or communications brought confidentially to the doctor's attention on attending the patient are within the provisions of the statute. Although our court has been quite liberal in construing the factor of "necessity" of the observations or communication to aid in treatment, there are numerous instances when it has been held that the physician's testimony is not privileged by the statute.

In a damage suit growing out of an automobile collision, the plaintiff claimed that the defendant had been under the influence of liquor. He called the defendant's physician, who had attended him shortly after the accident for cuts and bruises. Over objection, the doctor was allowed to testify that he "noticed an odor of liquor on his breath." Our supreme court held the testimony properly admissible because this observation was not "necessary to enable the doctor acting as a surgeon to treat defendant's cuts and bruises." The court relied on the restrictive wording of the statute, and pointed out that the defendant did not seek treatment on account of his intoxication.[19]

In another damage suit wherein the plaintiff's intoxication was an issue, the supreme court held that his doctor should have been permitted to testify whether at the time of his examination the patient was under the influence of liquor. The decision was based on the court's conclusion that the information as to the plaintiff's condition was not necessary in order to enable the physician to prescribe for his ailment.[20]

In a bastardy case, the complaining witness disclosed who was the father of her child to her attending physician. On trial, the doctor's testimony in this regard was ruled out as a confidential communication within the prohibition of the statute. However, the supreme court concluded that the testimony was admissible because the information so gained was not necessary to enable the physician to prescribe for his patient.[21]

In a suit for annulment of marriage, the paternity of the defendant's child was in issue. The physician who had attended the defendant at the birth of her child testified that he had examined the hospital records, which showed the child's weight and length, and stated that in his opinion it was a full-term baby. The court held that this testimony did not disclose information which was "necessary to enable him to prescribe" for the defendant, and, therefore, was not barred by the statute.[22]

In an action to recover damages for personal injuries, including a rupture, the plaintiff's attending physician testified that she had admitted that her rupture was not caused by the defendant's acts, but was a pre-existing condition. The court held that it did not appear that this information was "necessary to enable the doctor to prescribe for her as a physician or to do any act for her as a surgeon," and was, therefore, admissible. The court said: "So far as practicable the courts ought to see to it that the statute is not used as a mere guard against exposure of the untruth of a party, and that a rule intended as a shield is not turned into a sword."[23]

Moreover, our Court has been loath to seal the doctor's mouth when it does not regard his information as having been given or obtained in confidence.

In a libel suit against a physician in which a newspaper charged the doctor with causing death by the careless use of a trocar in vaccination, the plaintiff called physicians to testify as to the condition of children whom they had attended following the vaccination. Objection was made to the testimony of such attending physicians because

17. *People* v *Wittersheim,* 252 Mich. 538.
18. *People* v *Glover,* 71 Mich. 303.
19. *Perry* v *Hannagan,* 71 Mich. 303.
20. *Lincoln* v *City of Detroit* supra.
21. *People* v *Cole,* 113 Mich. 83.
22. *Yager* v *Yager,* 313 Mich. 360.
23. *Campau* v *North,* 39 Mich. 606, 609.

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the information obtained was in the course of medical treatment and because certain information had been gained from the parents of the children at the time of the visits. The supreme court, however, held the testimony of the physicians as to the children's condition to be admissible, saying, "the object of the statute is to prevent the abuse of the confidential relation existing between the physician and his patient and is for the protection of the latter. Where the relation is such that no confidence is reposed there is none to be abused."[24]

And in the Glover prosecution cited above, where the physician examined the prisoner in jail, the court in permitting the doctor's testimony said, "the privilege does not extend to cases where no confidential relations exist."

In another case, the letters of a wife to her husband containing confidential communications were held admissible as evidence, tending to show that she destroyed her insured property by fire, when the letters came into the possession of third persons, without collusion, by finding. In commenting on the subject of communications between husband wife, the court said: "The privilege is in derogation of the general rule that all persons may be compelled to testify concerning facts inquired about in courts of justice. It should be made effective, but ought not to be extended by the courts to cases where there has been no injury to the relation of the parties by the betrayal of the confidence reposed." Although this case does not involve physician and patient, it may be observed that the law regards the preservation of the family relationship quite as important as that of the physician and patient.[25]

Common observations, such as may be made by laymen, are not within the purview of the statute. So, our Court has permitted a physician to testify to the general health and mental condition of a person upon whom fraud and undue influence were allegedly exerted, notwithstanding that the person on occasion had been a patient of the witness.[26]

In insurance litigation, it sometimes becomes important to prove that the assured had prior to his application been under medical treatment. In a number of cases involving life insurance policies, where representations as to previous health had been made by the assured in the application, our Court has allowed the attending physician to testify as to the number and dates of professional visits for treatment of the assured.[27]

In at least one case under similar circumstances, the doctor was permitted to testify that he had treated the assured for typhoid fever at some time prior to his making the application for insurance.[28]

Similarly, in an action for injury to his knee, allegedly occasioned by a defect in a sidewalk, plaintiff admitted that he sustained a prior injury to the same knee, but that he had recovered from it at the time of the second accident. The defendant denied this claim, and produced the plaintiff's physician, who testified that he had treated the plaintiff for his prior injury, that he had not been discharged from treatment by the plaintiff, but that he had refused to attend him further because of the calling of another physician without his consent. The Court held that such testimony was admissible and not prohibited by the statute.[29]

Generally speaking, the information obtained by a physician from an autopsy, even if the decedent was in his lifetime a patient, is without the purview of the privilege statute for the obvious reason that it is not concerned with "treatment."

Although the admissibility of doctor's memoranda and records concerning treatment of a patient are subject to the same rules and limitations as his spoken words, there are many records bearing on treatment and physical condition which by express statutory provisions and decisions of our Court are held to be admissible. Important among such admissible records are those of hospitals (except state mental hospitals) made in the usual course, regarding transactions, occurrences, or events which transpired at the hospital in the course of the patient's treatment or care.[30] Likewise, death certificates, birth records, and certain other required official reports from physicians, such, for example, as those which are filed in probate court concerning the condition of mentally ill, feeble-minded and epileptic, are held admissible during litigation.[31]

And so by means of introducing such records,

24. *Scripps* v *Foster,* 41 Mich. 742, 748.
25. *O'Toole* v *Ohio German Life Ins. Co.,* 159 Mich. 187, 193.
26. *Steketee* v *Newkirk,* 173 Mich. 222.
27. *Polish Roman Catholic Union* v *Palen,* 302 Mich. 557; *McKinney* v *Liberty Life Ins. Co.,* 263 Mich. 490; *Dittrich* v *City of Detroit,* 98 Mich. 245.
28. *Brown* v *Metropolitan Life Ins. Co.,* 65 Mich. 306.
29. *Dittrich* v *City of Detroit* supra
30. C.L. 1948 617.53; M.S.A. 27.902 (Enabling amendment added in 1935).
Gile v *Hudnutt,* 279 Mich. 358.
31. *Mulvena* v *Alexander,* 278 Mich. 265.

the privilege statute is completely stultified. Whereas the doctor who makes the death certificate is prohibited from testifying as to the cause of death, and a physician or surgeon may not disclose on the witness stand details of his treatment of the patient while in the hospital, these facts may quite fully be shown through the simple expedient of introducing the written record.

In addition to the variety of situations referred to above, we have in our state at least two statutes which expressly override the privilege act insofar as the admissiblitiy of certain evidence by physicians is concerned. One provides that "information communicated to a physician in an effort unlawfully to procure a narcotic drug, or unlawfully to procure the administration of any such drug, shall not be deemed a privileged communication."[32] The second is a statute which declares it a felony for persons afflicted with syphilis or gonorrhea to marry. It provides that "in all cases arising under this act any physician who has attended or prescribed for any husband or wife for either of the diseases above mentioned shall be compelled to testify to any facts found by him from such attendance."[33]

Disclosures Out Of Court

Although a very considerable body of statutory and case law has developed through the years regarding to doctor's duty to keep silent on the witness stand, the disclosures of his patient's medical secrets in the course of daily living has curiously enough received but scant attention from courts and legislatures. There are no statutes requiring doctors to pay damages to patients for the unauthorized divulgence of medical secrets. Reported cases of damage suits under the common law for breach of confidence are extremely rare.

The Supreme Court of Washington once said by the way of dictum that presumably a cause of action would lie against a physician for wrongfully disclosing a confidential communication.[34] In Nebraska, an action was brought against a physician under interesting circumstances. The defendant physician had examined the plaintiff, and, finding the patient to be afflicted with a contagious venereal disease, requested him to leave the boardinghouse where he was living. Later, finding the plaintifl still there, the physician informed the proprietor of the nature of the disease. The plaintiff was forced to leave the boardinghouse, although, in fact, he was not suffering with the disease diagnosed by the physician. The patient sued the physician for breach of the duty of secrecy. It was held that the plaintiff could not recover. The court said that the information gained by the physician from his patient, though confidential, must be given and received subject to certain qualifications. If the patient's disease is found to be of a dangerous and of so highly contagious or infectious a nature that it would necessarily be transmitted to others unless the danger of contagion is disclosed to them, then the physician should be allowed to make so much of a disclosure as is necessary to prevent the spread of the disease. A disclosure in such case would not be a betrayal of the confidence of the patient, the physician acting in good faith without malice, even though he were mistaken in his diagnosis.[35]

In California, a case arose when a physician's statement that the plaintiff patient was suffering from a venereal disease was overheard by a neighbor, who was a casual bystander. The court held that the patient was not entitled to recover damages.[36] In New York, where by statute the disclosure of records of patients in mental hospitals is prohibited, the court held that the wrongful disclosure of such confidence would give rise to a civil action for damages flowing from such wrong.[37] In New Jersey, a statute declares that records of optometrists concerning their patients are confidential, and forbids their unauthorized use. The court held that a violation of this statute gives rise to a civil action for damages, as it would in the case of doctors of medicine.[38]

Execpt the four cases above cited, no other in point has been noted in any American jurisdiction.

A few states have adopted statutes making "wilfully betraying a professional secret" cause for revocation of a license to practice medicine. Michigan and California have such laws. And Michigan is perhaps the only state which by statute also declares such conduct to be a misdemeanor.[39]

The interesting point in this connection is that, although our statute has been in force since 1907, there is no record of a single revocation of license or of any prosecution for such misdemeanor

32. C.L. 1948 335.67(2); M.S.A. 18.1087(2).
33. C.L. 1948 551.46; M.S.A. 25.6
34. *Smith* v *Driscoll,* 162 Pac. 572, LRA 1917C 1128.
35. *Simonsen* v *Swensen,* 177 N.W. 831.
36. *Shoemaker* v *Friedberg,* 183 Pac. 318 (1947).
37. *Munzer* v *Blaisdell,* 49 NYS 2d 915 (1944).
38. *Abelson, Inc.,* v *New Jersey State Bd. of Optometry,* 65A 2d 644 (1949).
39. C.L. 1948 338.53; MSA 14.533

to be found in this state. In any event, our Court has had no occasion to construe the expression "wilfully betraying a professional secret." What the Court would consider a "professional secret" to be, in light of the modern attitude among the lay public regarding disease and its treatment, and the common discussion of the subject in newspapers, magazines, and at ordinary gatherings is, of course, conjectural. But it may safely be said that few people regard their physical ailments and their treatment as secrets, except perhaps in connection with venereal diseases, abortions, and possibly psychiatric conditions. Would the Court ignore the AMA canon of ethics, hereinbefore quoted, which allows disclosures in many instances? Probably not. It is certainly not clear that "wilfully betraying a professional secret" would be tested by the same rules which have been applied to confidential communications under the privilege statute.

Only one reported case has been found in point. It arose in California. A physician wrote a letter to his former office girl, containing references to certain of his female patients, to one of whom he had given general information about sex matters and on others of whom he had performed surgical operations, including a child delivery. The court held that this did not constitute "wilfully betraying a professional secret" so as to authorize the revocation of the doctor's license.[40]

Chafee comments on the anomaly of the law's seeming indifference to medical disclosures other than on the witness stand, saying:

> "Legislatures and courts have been occupied for over a century in closing the physician's mouth in the very place where the truth is badly needed. And yet the much more important obligation of his silence in private life has hardly been considered. In the few instances where honest patients do dread disclosure of their physicial condition by a doctor, their fear is not that the truth may some day be forced from him in court, but that he may voluntarily spread the facts among his friends and theirs in conversation. Yet against this really dangerous possibility the statutes and courts give almost no protection."[41]

May it be that the reason is to be found in a more mature attitude of the public toward problems of human disease and the removal through education of the veil of secrecy concerning matters medical?

40. *McPheeters* v *Medical Examiners*, 284 Pac. 938 (1930).
41. 52 Yale Law Journal 617.

Disclosures Which Must Be Made

Aside from the statutory provisos and overriding legislation referred to above, modifying the original concept of the privilege statute, the Michigan Legislature has from time to time adopted a number of laws which make it mandatory for the doctor to file official disclosures concerning his patients, otherwise regarded as confidential. The general welfare of society has obviously impelled our lawmakers not only to remove the seal from the doctor's lips, but actually to force him under penalty to make known his patient's secrets. A brief review of the principal statutes of this type may be of some interest to the medical profession particularly.

Omitted from the following list are the well known statutes requiring the attending physician to furnish specified information on official forms regarding deaths[42] and births.[43] The required data include diagnosis of cause of death, and, as to birth, considerable matter bearing on the physical condition or pathology of mother and child.

Specially dealt with are records of births out of wedlock.[44] The statute makes it the duty of the physician in attendance to file a particular certificate. As to stillbirths the certificate requires particularization by the physician of the reasons therefor.[45]

It is made the obligation of physicians to report immediately to the chief of police or sheriff cases which he has under his charge or care of persons suffering from any wound or injury inflicted by means of a knife, gun, pistol or other deadly weapon or by other means of violence. Violation of the duty is declared to be a misdemeanor.[46]

Another statute requires the physician to notify the coroner of the death of any person who shall have died suddenly, accidentally, violently or as the result of any suspicious circumstances, and particularly from an abortion, whether self induced or otherwise.[47]

A physician must within ten days report to the department of health on provided forms every case of occupational disease which comes to his professional attention. The form is detailed and demands information as to the nature of the dis-

42. C.L. 1948 326.9; M.S.A. 14.229.
43. C.L. 1948 326.12; M.S.A. 14.232.
44. C.L. 1948 326.12; M.S.A. 14.232.
45. C.L. 1948 326.15; M.S.A. 14.235.
46. C.L. 1948 750.411; M.S.A. 28.643.
47. C.L. 1948 773.19; M.S.A. 28.1187

ease and a variety of other confidential matter.[48]

Antenuptial examinations are made by statute the essential responsibility of the physician. The problem, of course, is to determine whether the parties to the proposed marriage, or either of them, suffer from a venereal disease. A proper certificate following the examination must be signed and delivered by the physician.[49]

Every licensed physician is required to give notice in writing on forms furnished by the state commissioner of health and pursuant to regulations of the health department of every case of any form of venereal disease which comes under his professional guidance. The report must be made within twenty-four hours of the time that the physician determines that the patient is so afflicted.[50]

Under another special statute, every practicing physician is required, within twenty-four hours, to notify in writing the health officer of his community of every case of any form of tuberculosis which comes under his professional observation. The notice must be made on blanks furnished by the state commissioner of health and shall contain such information as may be required by the commissioner.[51]

Under yet another statute, a physician is required under penalty to report immediately all cases of smallpox, cholera, diphtheria, scarlet fever, or any other disease dangerous to public health, which is brought to his professional attention. Regulations of the state department of health, made pursuant to statute, list sixty-six communicable diseases, including dog bite, as covered by the statute. Recently, cancer has been made a reportable disease, although obviously not communicable. Cases of persons suspected of having such diseases must also be reported. The manner of reporting and the extent of information to be furnished are clearly set forth in the regulations of the department.[52]

The Afflicted Children's Act provides that any child under twenty-one years of age, married or unmarried, who is afflicted with a physical defect or illness which can be remedied, including acute fracture, or who is pregnant, shall be deemed an afflicted child. If a physician has under his care an afflicted child, he is expected to notify a representative of the Crippled Children's Commission or the probate judge. Upon investigation of the circumstances, the physician or surgeon is required to make a written certificate concerning the condition of the child.[53]

The statute which permits secret marriages by the probate judge in cases of unmarried pregnant women provides that the judge may in his discretion require a certificate from a duly licensed physician that the applicant, according to an examination made by the physician, is pregnant. And, if so requested, it would be the duty of the physician to make the examination and certificate accordingly.[54]

Pursuant to the statute dealing with cases of insanity, feeble-mindedness and epilepsy, the probate judge before whom the determination is made is required to appoint two reputable physicians to examine the person involved, concerning his alleged state of insanity, feeble-mindedness or epilepsy. Should a doctor accept such an appointment, it becomes his duty to make under oath a certificate as to the mental condition of such person and file the same with the probate court. The report so filed becomes an official court record and may, as has been pointed out earlier in this article, be used in collateral litigation.[55]

48. C.L. 1948 419.1; M.S.A. 17.431.
49. C.L. 1948 551.151; M.S.A. 25.25.
50. C.L. 1948 329.202; M.S.A. 14.345(2).
51. C.L. 1948 329.401; M.S.A. 14.361
52. C.L. 1948 327.44; M.S.A. 14.104.
53. C.L. 1948 722.305; M.S.A. 25.442(2)(5).
54. C.L. 1948 551.201; M.S.A. 25.51
55. C.L. 1948 330.20; M.S.A. 14.810.

HIPPOCRATIC OATH

The modernization of the Hippocratic Oath by the World Medical Association, known as the Declaration of Geneva (1948), is known to very few and is worthy of note. It runs—

Now being admitted to the profession of Medicine, I solemnly pledge to consecrate my life to the service of humanity. I will give respect and gratitude to my deserving teachers. I will practice medicine with conscience and dignity. The health and life of my patients will be my first consideration. I will hold in confidence all that my patient confides in me. I will maintain the honor and noble traditions of the medical profession. My colleagues will be as my brothers. I will not permit consideration of race, religion, nationality, party politics or social standing to intervene between my duty and my patient. I will maintain the utmost respect of human life from its conception. Even under threat I will not use my knowledge contrary to the laws of humanity. These promises I make freely and upon my honor.

Opinion Evidence from Medical Experts

By Buell Doelle, LL.B.
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WHEN medical experts feel the impact of legal rules of evidence, a clash of professional philosophies results to create an aftermath of criticism of both lawyer and doctor.

For the public is profoundly interested in the consequences of expert medical opinion evidence.

In all actions for personal injury or death, as well as in will contests, insanity proceedings, and many criminal cases, the complex medical questions which arise can be addressed only to doctors who are experts in their profession, with the accuracy and honesty of their opinions being of paramount importance to litigants, as well as to the bench and bar in the administration of justice.[1]

Of those who feel that criticism of lawyers and doctors is justified, it is observed that a claimant's lawyer is too energetic in pressing upon the attending physician the seriousness and permanency of his client's injuries, whereas the defendant's lawyer is interested only in minimizing these injuries, two differing methods of approach which the honest, conscientious doctor resents.[2]

The Lawyer Shifts the Issue

In answering this complaint of the doctor, the lawyer employs a familiar trial technique, and shifts the issue to the doctor, complaining that the doctor fails in his approach because of his own professional pride, and, even, conceit in his skill—a conviction that he never achieves (medically or surgically) *anything but a perfect result!*[3]

As a rejoinder, an eminent medical-legal expert has said:[4]

"No one ever saw an ignorant, incompetent or crooked expert clamoring at the door of the court room for admission to the witness stand as a witness. The lawyers put them there."

Quite so! But, the lawyer has a word, too, in language of an early decision of the Michigan Supreme Court, speaking of the medical expert:[5]

"The physicians were called in, not to give medical aid but to make up medical testimony; and the declarations were made to them while engaged in that work. It would be difficult to find a case more plainly within the mischief of the excluding rule."

An author-doctor, however, taking lawyers to task, wrote:[6]

"I learned that the game is to cause you to swear that you will tell the truth, the whole truth and nothing but the truth and then the lawyers battled to see to it that you did not do either of the three things you were under oath to do."

But, he observed, as explanatory of a lawyer's human frailty:[7]

"At the same time you cannot blame them for there seem to be doctors available for testifying to anything a lawyer may wish them to do."

A Doctor Resents Affront to His Skill

With reference to the observation that a doctor frequently resents being questioned about the permanency of injuries, as a reflection upon his method of care or the results obtained, a discerning trial judge has commented:[8]

"Frequently, there is a serious question in a personal injury trial as to the permanency of injuries to the person. The attending physician has done his best. Too frequently, however, the attending physician resents any suggestion or inference by the attorney for the claimant that permanent injuries may or could result from the accident. Is this due to a misunderstanding of the lawyer's motives, or to a feeling of professional pride on the part of the physician who resents the inference of permanent injury as a personal affront to his professional ability?

"In appraising the injury, and in determining whether there is a degree of permanence, the doctor should realize that his patient, who is one with the lawyer's client, has the right to have his case presented once, and only once, to a judge or jury. Conceding that the attending physician has provided the best possible professional care, there still may exist the reasonable probability of permanent injury. In such case, the lawyer's proposal of a careful scrutiny of the question of permanent injury should not be resented. If the doctor makes a mistake

1. Oscar T. Toebaas, 1952-3 President, Wisconsin Bar Association, at Michigan State Bar Summer Institute, July 24, 1925.
2. *Medical Evidence,* by D. V. W. Beckwith, presented at the Legal-Medical Institute, Milwaukee, Wisconsin, April 22, 1950, Wisconsin Bar Bulletin (August, 1950).
3. Id.
4. Dr. William C. Woodward, *Journal of the American Medical Association,* October, 1932.
5. *Grand Rapids & Indiana R. Co.* v. *Huntley,* 38 Mich. 537 (31 Am. Rep. 321).
6. Dr. Arthur E. Hertzler, *The Horse and Buggy Doctor.*
7. Id.
8. Hon. Lucien F. Sweet, Judge, Ninth Judicial Circuit, Kalamazoo, Michigan: Address before 1952 Joint Meeting of Kalamazoo Bar Association and Kalamazoo Medical Academy.

about the matter of permanent injury, his own patient will be denied the right of full recovery, to experience forever after both serious and pecuniary loss."

Search for Criticism Breeds Only Distress

Forays in search of plunder of criticism will avail the lawyer or doctor nothing but distress. Eventually the lawyer will recognize that he sorely needs the expert opinion evidence of the doctor, and the doctor will sense that the public expects him to play his part in the administration of justice.

Surely, in an action for personal injury or death, a plaintiff should have competent expert medical evidence to aid his recovery of compensable damages, just as a defendant should be protected from a fraudulent or exaggerated verdict by the same kind of reputable expert testimony. While the doctor may suggest that "to know the lawyer is not to love him," he may find comfort in learning why rules of law make their impact upon his expert opinion evidence in a court room!

Why Circumscribe Expert Opinion?

Why, then, are legal restrictions placed upon the reception of expert medical evidence? One brief summary gives as its opinion:[9]

"The objection most consistently voiced to exclude expert opinion is that such testimony 'invades the province of the jury.' This technical phrase embraces two circumscribing limitations upon the use of expert testimony: (1) that the witness shall not be allowed to make statements which rest implicity upon his estimate of the weight of the evidence and the credibility of other witnesses and (2) that the witness shall not be permitted to express his opinion upon matters which constitute the ultimate facts in issue. The results which have attended that application of the rule excluding testimony which invades the province of the jury frequently appear to be inconsistent with the basic purpose of expert testimony. This situation led one eminent writer to say, 'The apparent purpose of the rule might have been supposed to be (by one unacquainted with our jurisprudence) to exclude testimony in proportion to its significance and directness; and the wonder often is how a jury can under the circumstances come to an intelligent conclusion without the aid of banished testimony.' This anomalous result, together with the contrariety of rulings existing even in the same jurisdiction, render profitable an investigation into the operation of the rule, its present status, and its soundness."

It is pertinent that the term "expert testimony" does not embrace all species of opinion evidence, but refers solely to the opinion testimony of witnesses who are permitted to testify because of their special qualifications, and whose testimony must be elicited by hypothetical questions incorporating all the facts upon which the expert is asked to give his opinion.[10]

Judicial Distrust Greets the Expert

One author has commented that, "another manifestation of the judicial distrust of experts is the set of rules in some states placing severe restriction upon the testimony of doctors who have examined the plaintiff not for the purpose of treating him as a patient, but for the purpose of preparing himself to testify about his injury."

This authority observes, further:[11]

"Certainly it is good practice and in furtherance of justice for parties to call in such doctors, frequently specialists, to supplement the testimony of the attending physician who is usually not a specialist and is frequently an unpractised and inadequate witness. But the courts in Texas, Illinois, Wisconsin and Washington and perhaps in other states, by what seems a rather questionable rule, have decreed that the doctor employed not to treat but to testify must be limited to giving his opinion based solely on the objective facts observed by him (or upon a hypothetical question), and is barred from giving an opinion based even in part upon what the patient told him about the history of his injury or his sufferings and symptoms."

Michigan Exclusion is Strict Rule

Michigan, as remarked earlier,[12] has always excluded testimony of an *examining physician,* who is not the *treating physician,* in attempting to relate a case history obtained from the plaintiff. In a later case, the Michigan Supreme Court, in considering the objection to introduction of the testimony of a specialist in nervous diseases, whose examination of plaintiff was for the purpose of coming into court and testifying, and not for the purpose of treatment, remarked:[13]

"The doctor realized the history of the case upon which he based his opinion or conclusion was hearsay. He testified:

" 'That is true, that is all hearsay. But it is the only way you can get a history, checking up for the different tests. She tried—seemed to make an honest effort to co-operate.' "

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9. 26 *Iowa Law Review,* p. 819.

10. McKelvey, *Evidence* (4th ed. 1932) Sections 155, 156; *DeGroot* v. *Winter,* 261 Mich. 660; *Kennedy* v. *Bay City Taxi Cab Company,* 325 Mich. 668.

11. *Louisiana Law Review* (March, 1952, p. 265), Charles T. McCormick, Prof. Law, Univ. of Tex.

12. Id., Note 5.

13. *Layton* v. *Cregan & Mallory Co., Inc.,* 269 Mich. 574, 579.

Hearsay Evidence Tempts Dishonesty

In ruling that this testimony of the expert, relating an opinion based upon a case history he had obtained from the plaintiff, was hearsay, the Court quoted with approval language from *Grand Rapids & Indiana R. Co.* v. *Huntley,* 38 Mich. 537 (31 Am. Rep. 321), which sufficiently persuades of the danger of permitting hearsay testimony as a basis for expert opinion:

> " 'The physicians here were not called in to aid or give medical treatment. * * *
>
> " 'They were sent for merely to enable the plaintiff below to prove her case. The whole course of the plaintiff was taken to no other end. She had in her mind just what expressions her cause required. They were therefore made under a strong temptation to feign suffering if dishonest, and a hardly less strong tendency if honest to imagine or exaggerate it. The purpose of the examination removed the ordinary safeguards which furnish the only reason for receiving declarations which bear in a party's favor. * * *' "

Scientific Information is Not Hearsay

In regarding the Michigan rule excluding hearsay testimony of this character, it should be noted that a case history obtained by an expert who examines the plaintiff for the purpose of giving testimony, and not for the purpose of treatment, does not come within the known exceptions to the hearsay evidence rule,[14] whereas an expert's knowledge of his fellow scientists' reported data, learned by perusing their reports and journals, has usually been regarded as an exception to the hearsay rule.[15]

Relation of subjective symptoms of the plaintiff to the examining physician, who is preparing to testify, may not be related by the physician on the witness stand; but, Michigan courts do permit a plaintiff to testify to his own subjective symptoms,[16] and an attending physician may also testify to subjective symptoms,[17] such statements of pain as described by witnesses being admitted into evidence upon the ground that they are "the natural and ordinary accompaniments and expressions of suffering," without which "it would be impossible in most cases to know of the existence or extent or character of pain. . . ."[18]

14. 41 *Columbia Law Review,* p. 1257; *O'Dea* v. *Mich. Cen. R. Co.,* 142 Mich. 265.
15. 2 Wigmore, *Evidence* (3d ed. 1940) Sec. 665 (b).
16. *Reck* v. *Whittlesberger,* 181 Mich. 463.
17. *Leedy* v. *Hoover,* 160 Mich. 449; *McDuffie* v. *Root,* 300 Mich. 286, 295.
18. Id., Note 5; *Rogers* v. *City of Detroit,* 289 Mich. 86, 90.

Spontaneous Declarations Are Admissible

It should be remarked that these spontaneous declarations of pain by the plaintiff, made in the presence of witnesses, are admitted into evidence, as *acts,* rather than as *declarations,* this rule never having been extended in Michigan so as to include declarations either of past suffering or of the causes in the past of such suffering, and thus to make such statements proof of the facts.[19]

It would appear, however, that the Michigan rule has been relaxed somewhat to permit the physician who examines the plaintiff solely for the purpose of testifying (while not being able to relate statements made by the plaintiff during the course of his examination), to testify to exclamations or manifestations of pain occasioned by his clinical examination, such as, a "tender area in the palm."[20]

"Stop, Look, and Listen"

One writer has erected a "Stop, Look, and Listen" sign which may be of value to the physician who has examined the plaintiff not for the purpose of treatment, but only to testify:[21]

> "I think it advisable to warn the doctor, when he is examining a party for the purpose of giving testimony only, that he should not base his testimony or his opinion on any statement made by the party to the doctor in the course of the examination. I have a number of times seen the testimony of doctors entirely stricken because they were unable to give an opinion which was not based in part at least on the subjective symptoms related by the patient, and their examination was not made with the rule in mind that their opinion could not be based in any degree on the subjective symptoms related to them."

Confining this discussion, at this point, to the presentation of expert testimony from a physician employed only to testify, several requirements of the law should be considered.

As previously noted, the expert testimony of such physician must be elicited by hypothetical question.[22]

Hypothetical Question Foils the Expert

Now, the doctor will most certainly believe that the hypothetical question was designed to prevent him from giving his testimony as a smoothly-flowing, consecutive, detailed presentation, and, after listening to the arguments between opposing at-

19. Id.
20. *DeVries* v. *Owens,* 295 Mich. 522, 529.
21. Id., Note 2.
22. Id., Note 10.

torneys about the legal hurdles which circumscribe hypothetical questions, he will probably agree with an eminent legal text writer, that, "The hypothetical question, misused by the clumsy and abused by the clever, has in practice led to intolerable obstruction of truth."[23]

One legal writer observed:[24]

"* * * Moreover, the hypothetical question is a comparatively ineffective way of presenting the expert's conclusions to a jury. And a long one is a real soporific! Reading a speech is bad, but how much more entertainment did the jury get from a question in a California court which covered eighty-three pages of typewritten transcript, followed by an objection covering fourteen pages."

While testimony of an expert nature may be adduced from a professional or skilled observer from inspections he has made, without the use of hypothetical questions, the hypothetical question must be employed where the expert's knowledge of facts is gained from other sources or persons, and, consequently, would be hearsay.[25] Not having the requisite personal knowledge of the truth of the facts, he should not be permitted to testify directly about them.

Fair Sampling of Facts is Presented to Expert

Clearly, the hypothetical question need not embrace all of the testimony in the case; but, the "opinion of the witness may be taken on any combination of facts which counsel may believe the jury will find to be established by the proofs."[26]

Nor must all of the facts assumed by the attorney propounding the question be free of dispute. While, frequently, objection is made that the hypothetical question contains statements which are untrue and unsupported by testimony, such dispute does not render the question improper, if the question fairly states such facts "as the proof of the examiner tends to establish and fairly presents in support of his claim or theory."[27]

Question to Expert Must Issue From Truth

Necessarily, however, *all of the facts and circumstances* recited by the examiner in his hypothetical question, upon which the medical expert is asked to base his opinion, *must be found to be true* by the jury, or trier of the fact, otherwise, the "answer of the witness is without probative force and must be disregarded by the jury,"[28] and, *a hypothetical question known to be based upon facts not shown by the evidence may be excluded.*[29]

Commencement of the hypothetical question is usually by a requirement of the examiner, such as, "Now, Doctor, assume that a young man, twenty-six years of age . . . ," or, less frequently, "Now, Doctor, supposing . . . ," or, even, "Now, Doctor, consider . . . "[30]

"There Might or Could Be" A Relation of Cause and Effect

After relating the material facts and circumstances upon which the opinion of the witness is desired, the expert is asked (in Michigan) as to whether the medical expert has an opinion, based upon a reasonable medical certainty, as to whether there *might* or *could* be a causal relations between the cause of injury and the result found.[31]

As explanatory of this restriction of the expert,[32] the Michigan Supreme Court, speaking through Mr. Justice Wiest (*DeGroot* v. *Winter,* 261 Mich. 660, 670-671), has employed this language:

"Expert opinion evidence is an exception carved out of the general rule confining a witness to a relation of facts, and is usually accomplished by means of hypothetical questions.

"Upon the issue of whether defendants were guilty of malpractice by commission or omission the expert could and did give opinion evidence. Upon the ultimate issue of whether plaintiff's condition resulted solely from malpractice, the expert should not have, but did give his conclusion as to a fact, not necessarily following malpractice, and in dispute. When a result may or may not be occasioned by malpractice, an expert medical

23. 2 Wigmore, *Evidence* (3d ed. 1940) Sec. 686.
24. Id., Note 11.
25. *O'Donnell* v. *Oliver Iron Mining Co.,* 273 Mich. 27, 36.
26. *In Re Rosa's Estate,* 210 Mich. 628, 640; *Bishop* v. *Gaudio,* 266 Mich. 267, 269; *Bosch* v. *Damm,* 296 Mich. 522, 529.
27. Id., Note 25 (pp. 36-37).
28. *Bosch* v. *Damm,* 296 Mich. 522, 529.
29. *People* v. *Bowen,* 165 Mich. 231.
30. *Trial Technique,* Irving Goldstein, p. 454.
31. *De Haan* v. *Winter,* 258 Mich. 293, 300; *DeGroot* v. *Winter,* 261 Mich. 660, 671.
32. Id., Note 11, pp. 272-273: "A few states, however, have retained the prohibitory rule, as applied to expert testimony as to cause, in a form so extreme that it is surprising that it should ever have been seriously defended. This is the view that the doctor may not testify that in his opinion the accident did cause the present disability, but may only answer the question, 'Can you say whether in your opinion it *could* or *might* have caused the injury?' As has been pointed out, this restriction is unfair to the expert. If he answers yes, the jury may believe that his opinion is no stronger than a belief in the *possibility* of causal relation, whereas in fact the doctor may be convinced that the accident *was* the cause, but is not allowed to say so. Moreover, if he should answer *no,* it could not have been the cause, the answer would offend the court's canon, for it would clearly be an opinion on the issue."

witness invades the province of the jury when permitted to go beyond stating that it *could,* and in saying that it *did,* occasion the result. Such an opinion is but the private judgment of the witness and not competent evidence. Whether the alleged malpractice could occasion the result complained of was one of science only. Whether malpractice did occasion such result was in controversy, and, therefore, not one of mere science. When the facts are admitted and not in dispute, the question, if answered, may be considered one of science. But when a result could have been occasioned by one of two or more causes, the ultimate fact of which cause occasioned the result is for determination by the jury, and a medical expert may not, in case of conflicting evidence, invade the province of the jury and testify that the result was in fact occasioned by one cause only.

"Rules of evidence should have stability. The rule violated in this case was early announced by this court, repeatedly followed, supported by the weight of authority, has led to no injustice, and has kept medical experts from invading the province of the jury and should be maintained."

In the earlier case of *De Haan* v. *Winter,* 258 Mich. 293, 300, Mr. Justice Wiest, in giving the opinion of the Court, declared that the medical expert could only go as far as "to state that the alleged malpractice of defendant *might* cause the bow in the leg." (Emphasis supplied.)

Future Results of Injury Determined by Expert Testimony

Reasonably probable future consequences of an injury, as discussed heretofore,[33] being of paramount importance to the injured person, will be determined by the jury upon the opinion evidence of medical experts, adduced by direct or hypothetical question, depending upon whether he is called as an expert to testify upon a matter of hypothesis, or whether he is testifying as an expert observer of the bodily condition, and with the knowledge and history of the patient, gained as the attending physician.[34]

In *Pearce* v. *Rodell,* 283 Mich. 19, the Michigan Supreme Court, speaking through Mr. Justice Potter, in considering whether an expert medical witness, who had been given an opportunity to observe and examine the patient, was competent to testify to the extent of a certain injury, whether the injury was permanent or not, and the probable results of the injury, said, at pages 31 to 33:

"* * * The opinion of a medical man is admissible upon the condition of the human system, and upon the probability of recovery from an injury, or upon other questions peculiarly within his knowledge as such. . . . So, it is said a physician is competent to give his opinion as to the probability of recovery generally. . . . He may give his opinion that physical injuries are, or are not, of a permanent character. . . .

"In the case here, not only did the physicians testify very fully as to the facts upon which they based their conclusions, but they were entitled to give the opinion which they did give on the probable effects of the injury which plaintiff received. The probable effects of an injury such as that suffered by the plaintiff could be shown only by the opinion of a competent physician. . . ."

An Expert Witness is Not a Jury

It is the Michigan rule that an expert witness may not be permitted to base his opinion upon the testimony of other witnesses in the case, since the effect of such questioning would be to require the witness, and not the jury, to pass upon the credibility and correctness of previous testimony.[35]

Nor may an expert medical witness be permitted to give an opinion as to the credence to be given the testimony of *other experts* who testified in the case, since this, too, would be invading the province of the injury.[36]

Medical Textbooks Are Not Evidence

Use of medical textbooks as evidence is quite generally prohibited in all jurisdictions, although, on direct examination, a doctor may mention the name of a text, as supporting his opinion.[37]

While this mention of a text may subject the medical expert to cross-examination based upon the particular text,[38] an examiner on cross-examination may not question an expert about text authority which has not been injected into the case.

Reason for this latter rule of law can be gleaned from the opinion of the Michigan Supreme Court, in *Sykes* v. *Village of Portland,* 193 Mich. 86, 102-103:

"In *People* v. *Millard,* supra, this Court said:

"'Another source of error quite as mischievous, * * * was the introduction of what is no more than hearsay evidence, in the shape of references to writers and books in such a way as to invoke their authority. As we have had occasion on more than one record to explain heretofore, expert testimony is only admissible on the theory that the jury cannot be supposed to comprehend the significance of facts shown by other testimony

33. Id., Note 8.
34. *Pearce* v. *Rodell,* 283 Mich. 19, 30; *Bishop* v. *Gaudio,* 266 Mich. 267, 269: ". . . . reasonable certainty of future probable consequences of injury."
35. *Kempsey* v. *McGinnis,* 21 Mich. 123, 140-141; *O'Donnell* v. *Oliver Iron Mining Co.,* 262 Mich. 470, 474.
36. *In Re Elliott's Estate,* 269 Mich. 677, 686.
37. 6 Wigmore, *Evidence* (3d ed. 1940), Sec. 1700; 82 A. L. R. 440.
38. *De Haan* v. *Winter,* 258 Mich. 293, 299; *De Haan* v. *Winter,* 262 Mich. 192, 196.

which needs scientific or peculiar explanation by those who do not comprehend it. But this does not permit hearsay testimony of the written or spoken opinions of other persons, whom the jury have no means of examining as to their learning, their honesty, or their sources of special knowledge.' "

Even more pertinently, from the standpoint of the medical witness, *People* v. *Millard,* 53 Mich. 63, 75-76, pointed out:

" * * * No one can tell whether a medical book or opinion is reliable or not, until he has applied himself with some fitting preparation to its study and criticism. The book may be good in part and bad in part, and neither court nor jury can presumptively ascertain its quality."

Lawyer Examiner May Possess Guile

Both of these decisions which are quoted condemn the familiar device of lawyers of reading excerpts from text authorities into evidence, under the guise of cross-examination or of ascertaining the familiarity of the expert witness with such texts, in the hope that the purportedly contrary opinions may persuade the jury to disregard the testimony of the witness on the stand.

Obviously, since opinions on many questions of science are so constantly undergoing change, it is impossible to know at the time of trial whether the author of a text still entertains the views which he expressed in his writing.[39]

While it is a common practice for doctors to base their diagnosis upon their own clinical examinations, supplemented with x-ray examinations interpreted by expert radiologists, with biopsies performed by technicians, and with blood, sputum and urine tests conducted by assistants and reduced to written reports, it is quite apparent that such examinations and tests conducted by strangers may not be used by the expert medical witness in giving his opinion, if objection to their consideration is raised.

Must Produce X-Ray Films

In a recent case, *Kennedy* v. *Bay City Taxi Cab Company,* 325 Mich. 668, the Michigan Supreme Court held that it was error to permit a treating physician to relate his conclusions from x-ray films, as to what the x-ray disclosed, without producing the films upon which his testimony was based, or without explaining the non-production of the films.

And, in *Mapes* v. *Berkowitz,* 304 Mich. 278, reference to the results of some apparently non-existent blood tests (there was some testimony of taking blood from the plaintiff), which were incorporated in the hypothetical question, brought about a striking of the question from consideration of the jury, the Supreme Court affirming a directed verdict. Quoted transcript of the trial indicates that the trial judge, in ruling on the objection, said:

"The elements of this question are not supported by the testimony in the case, that is all the Court can rule, and being a hypothetical question, there must be some testimony to support each claim in the question or it cannot be submitted. In fact on a hypothetical question the jury have to find from the evidence that each element in the question is supported by the evidence, not only intimated, so they can find that has been established, there are several elements that the testimony doesn't form a basis for. If you have testimony to show what was done at the hospital, put it on, let us know what it is."

Final Test of Expert is Finding of the Jury

Finally, while the weight and sufficiency of expert opinion evidence is for the jury, or trier of fact, to decide, according to the same tests which apply in the scrutiny of all other evidence in the case, it should be noted that if the jury finds, from all of the evidence in the case, that the facts stated in the hypothetical question are not true, then the jury may disregard the *entire answer* to the question.

There is no way of partially salvaging the good of an opinion which is based upon faulty underpinning!

In *Thornton* v. *Berry,* 259 Mich. 529, the Michigan Supreme Court, speaking through Mr. Justice McDonald, at pages 531 and 532, said:

" * * * The answer of the expert assumes the facts asserted in the question to be true, and if they or any one of them are not true the answer is worthless as evidence. *Ballance* v. *Dunnington,* 241 Mich. 383."

Non-Resident Experts Welcome to Michigan

Michigan, unlike some other states,[40] has no statutory prohibition against medical experts of the several states giving opinion evidence in Michigan. And, its courts seem to treat non-residents with the same courtesy extended to Michigan medical experts. In *Sampson* v. *Veenboer,* 252 Mich. 660, an Illinois physician, with a considerable background of study in Germany, and conducting of small hospitals at Chicago, Illinois,

39. Id., Note 2, p. 13.

40. Id., Note 2.

seemed to ingratiate himself into the Court's affection by his flattery of the standards of surgery in Grand Rapids (Michigan), and his testimony was acceptable (by hypothetical question) in a malpractice action against a Grand Rapids surgeon. The verdict and judgment for plaintiff was reversed on other grounds.

Wisconsin and Michigan—A Matter of Opinion

In a Wisconsin case (*Morrill* v. *Komaskinski,* 256 Wis. 417), the action of the trial court in permitting a *Michigan osteopathic physician* who treated the plaintiff to testify against a *Wisconsin medical doctor* in a malpractice case was approved; but, in *Bryant* v. *Biggs,* 331 Mich. 64, the Michigan Supreme Court held that the testimony of a *medical doctor,* as an expert witness, was not competent for the purpose of proving alleged malpractice of an *osteopathic physician.*

Expert Witness Must Qualify

It is axiomatic that the qualifications of the expert witness must be shown. Unless the qualifications are waived, no presumption exists that the expert is qualified.

In *People* v. *Hawthorne,* 293 Mich. 15, defense counsel sought to qualify a college professor as an expert to give testimony about insanity. The professor had received degrees of bachelor of arts, master of arts, bachelor of divinity, doctor of philosophy, and doctor of psychology; he had studied at eight different colleges, and had taught at four; he had given courses in general psychology; he had written books on psychology, and he had given "mental tests."

The Michigan Supreme Court, however, held that insanity was regarded as a disease, and within the realm of medical science. "Only physicians," the Court said, "can qualify to answer hypothetical questions as experts in such science."

Number of Experts Limited—as Well as Witness Fees!

While, perhaps, of little significance, there is the statutory provision, that[41]

"No more than three (3) experts shall be allowed to testify on either side as to the same issue in any given case: *Provided,* The court trying such case, may, in its discretion, permit an additional number of witnesses to testify as experts."

With respect to fees which experts shall be paid, we find the special statute:[42]

"No expert witness shall be paid, or receive as compensation in any given case for his services as such, a sum in excess of the ordinary witness fees provided by law, unless the court before whom such witness is to appear, or has appeared, awards a larger sum, which sum may be taxed as a part of the taxable costs in the case. Any such witness who shall directly or indirectly receive a larger amount than such award, and any person who shall pay such witness a larger sum than such award, shall be guilty of contempt of court, and on conviction thereof be punished accordingly."

On the other hand, ordinary witnesses receive for attending in any suit or proceeding, pending in a court of record, $5.00 for each day, and $2.50 for each half day, in addition to traveling expenses of ten cents a mile.[43]

One of the most vexatious factors in the relation between doctors and lawyers is the matter of fees. When a doctor testifies only to facts which are not the subject of expert testimony, he is not entitled to compensation as an expert witness. He is then in the same category as an ordinary witness. One who gives expert medical evidence, however, as an opinion based upon his learning and experience, is entitled to receive the compensation of an expert witness.[44]

Despite His Loss, The Lawyer Pays

Moreover, in the interest of lawyers, it should be remarked that some doctors make a habit of charging the plaintiff's attorney for reports about the plaintiff, who is also the doctor's patient, when the plaintiff's attorney is handling the case on a contingent basis. Frequently, the doctor will not be paid his charges for treatment and surgery if the plaintiff's attorney is not successful in his litigation. Thus, it would seem that the attorney was, in reality, working for the doctor, and, that if the case is finally lost, the attorney might reasonably bill the doctor for his legal services in the same amount that the doctor bills the lawyer for testifying![45]

This would be a *set-off in good conscience!*

Court to Appoint Experts Under Proposed Legislation

House Bill No. 90 has been introduced in the Michigan Legislature, as a product of a special committee of the Detroit Bar Association which

41. 1948 Compiled Laws, Sec. 617.70 (Mich. Stat. Ann. §27.919).
42. 1948 Compiled Laws, Sec. 617.69 (Mich. Stat. Ann. §27.918).
43. 1948 Compiled Laws, Sec. 648.3 (Mich. Stat. Ann. §27.2557).
44. Id., Note 8.
45. Id.

has the approval of the State Bar Committee on Civil Procedure.

This bill, to amend Chap. 17 of Act No. 314 of the Public Acts of 1915, provides for the appointment by the court, in any civil proceeding, where a dispute arises between experts, either on motion of the court, or at the request of either party, one or more experts to investigate such issues and to testify at the trial.[46]

The bill introduced in the House is identical to the State Bar proposal, except for the one word, "Not," which has been eliminated. In the State Bar proposal, the provision read: "The fact that such witness or witnesses have been appointed by the court shall NOT be made known to the jury."

This bill may serve the public demand for greater harmony in medical opinions, following, as it appears to do, the rules of expert opinion evidence adopted by the Committee on Evidence of the American Law Institute, in its *Model Code of Evidence,* published in 1942. It may, however, run afoul of certain legal entanglements.

Workmen's Compensation Provision Was Declared Unconstitutional

It may be recalled that the Workmen's Compensation Act, Part VII, Sec. 6, which was added by Act No. 61 of the Public Acts of 1937 (Comp. Laws Supp. 1940, §8485-6, Stat. Ann. 1945 Cum. Supp. §17.225), was, as follows:

"In case the employe is alleged to be suffering from an occupational disease and there shall be a dispute with respect thereto, the said board, or any member thereof, shall appoint a commission of three qualified impartial physicians to examine the injured employe and to report. The report, when signed by at least two of the members of said commission, shall be final and conclusive as to the condition of said employe with respect to the alleged disease or diseases. Members of the commission shall receive such compensation for their services as shall be fixed by the board, to be paid from the appropriation to the department of labor and industry."

This statute worked quite effectively (!) until April, 1946, when the Michigan Supreme Court declared it unconstitutional, in *Dation* v. *Ford Motor Co.,* 314 Mich. 152. Admittedly, the "final and conclusive" feature of the report was objectionable, there being no requirement with reference to notice, nor attempt to safeguard a fair hearing, but the point is, at the time the bill was passed, it seemed to be the solution to a problem, and considerable legislative and public discussion was had about its merits.

Public indignation may well be upon the march, as it becomes aroused at the failure of expert testimony to mold itself into a pattern, but its travel should be narrowed into constitutional roadways!

Another provision of the Workmen's Compensation Act, initially enacted, in 1912, in substantially the same language, is:[47]

"The compensation commission or any member thereof may appoint a duly qualified impartial physician to examine the injured employe and to report. The fee for this service shall be $5.00 and traveling expenses, but the board may allow additional reasonable amounts in extraordinary cases."

There is no safeguard in the statute as to the manner in which this report is to be received into evidence, although the statute is but rarely invoked by the Commission in adversary proceedings.

The former statute requiring an employe to submit himself to periodical physical examination to determine the existence of occupational dust diseases, under penalty of being deprived of benefits of the Workmen's Compensation Act,[48] was declared unconstitutional by the Michigan Supreme Court, in *Foundry Workers Union* v. *Foundry Co.,* 321 Mich. 265.

(Continued on Page 428)

46. "Chap. 17. Sec. 69A. Whenever, in a civil proceeding, a dispute arises between experts, the court on its own motion, or on the request of any party, may appoint 1 or more experts, not exceeding 3 on each issue, to investigate such issues and to testify at the trial. Such expert witness must be appointed from a panel designated by the society, association, board or similar organization in his profession or field, and the compensation of such person or persons shall be fixed by the court at a reasonable amount and paid as directed by the court. The fact that such witness or witnesses have been appointed by the court shall be made known to the jury. Any party to the proceeding may also call other expert witnesses.
"Experts called by the court or by the parties in the proceeding shall be permitted access to the persons, things or places under investigation for the purpose of inspection and examination.
"An expert witness may be asked to state his inferences, and these may be stated as a fact, whether these inferences are based on the witness' personal observation, or on evidence introduced at the trial and seen or heard by the witness, or on his technical knowledge of the subject, without first specifying hypothetically in the question the data on which these inferences are based. An expert witness may be required, on direct or cross-examination, to specify the data on which his inferences are based."

47. 1948 Compiled Laws, Sec. 413.9 (Mich. Stat. Ann. §17.183).

48. Act No. 318 of the Public Acts of 1945 (Comp. Laws Supp. 1945, §8485-4. Stat. Ann. 1947 Cum. Supp. §17.223).

Malpractice as Seen by a Lawyer

By Clayton C. Purdy, A.B., LL.B.

Detroit, Michigan

THE TERM "malpractice" applies to a great many types of cases, but in the minds of lawyers and physicians it usually refers to actions against the medical profession only. Few lawyers, and not many medical men, thoroughly understand the conditions under which a physician, surgeon or dentist may become liable for improper treatment of a patient. Because of this lack of knowledge, a great number of cases are improperly instituted against members of the medical profession.

The definition of the duties of a physician or surgeon is well set forth in the old case of Gillette v. Tucker, 65 N.E., 1865, wherein the court stated:

> "A surgeon and physician, employed to treat a case professionally, is under an obligation, which the law implies from the employment, to exercise the average degree of skill, care, and diligence exercised by members of the same profession, practicing in the same or a similar locality, in the light of the present state of medical and surgical science and that he will indemnify the patient against any injurious consequences which may result from his want of ordinary skill, care, and attention in the execution of his employment."

This statement, we believe, embodies all of the elements that courts usually set forth as the duties of the physician and surgeon to his patient.

In order for a plaintiff to prove a malpractice case, the following steps are necessary:

1. He must prove there was a legal duty to perform.
2. He must prove a failure to perform that duty.
3. He must prove an injury which is directly traceable to the breach of duty, namely proximate cause.

The great majority of cases predicated on malpractice grow out of the assumption that there was negligence or failure to do, or not to do, the thing which the condition of the patient required should, or should not, be done. We should say at the outset that a bad result is no evidence of negligence. Yet, in ten out of twelve cases the layman, and not too infrequently the physician himself, mistakes a bad result for conclusive evidence of negligence. To say that more than 60 per cent of the cases predicated upon malpractice are the result of this misconception of the law would be a most reasonable statement. The condition usually starts with the dissatisfaction of the patient. The patient, being dissatisfied with the results, consults another physician; that physician sees the bad results but has not the history of the case, nor does he have the picture of what the original physician faced at the time he first saw the patient. But, in too many cases, without having all of these facts before him, he will presume to say what should have been done, and which, if done, would have produced a different result. Inadvertently, or thoughtlessly, or for some other reason, the physician criticizes the work of his fellow practitioner and helps to nurture the seeds of discontent which were already in the patient's mind. This results in the grievance being magnified and eventually leads the patient to institute an action as the only possible satisfaction of his claimed injury. Moreover, it is my observation that the thoughtless or inadvertent criticism of one physician of the work of his fellow physician has been the cause of the majority of the unwarranted malpractice actions. It is very easy to build up your own reputation at the expense of the other fellow—and this equally applies to the legal profession, although there, for some reason, a malpractice action is not usually the result.

Such a state of affairs is unfortunate for the medical profession. In spite of all precautions taken, or how capable and diligent the doctor may be, mistakes will occur and errors in judgment will be made, which of themselves are no foundation for a cause of action.

The following illustrates a remote cause of difficulty that could well be blamed on the doctor.

> In a small midwestern city, during a severe winter, when ice-covered walks and streets, for weeks at a time, caused an unusually large number of fractures, difficulty was experienced by the medical profession with plaster casts. The plaster used would not sufficiently harden to maintain reduction of the bone fragments. Investigation was instituted and finally a representative of the

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gypsum company which had furnished the material found an error in the technique of mixture which accounted for the trouble.

As long as doctors are willing to criticize the work of their fellow practitioners, judging only from results which can be seen and the statements of the patients, we must expect malpractice actions to continue to increase. Before embarking upon the criticism of the work of fellow practitioners, doctors should make sure that they have been given correct statements of the conditions which prevailed at the time treatment was administered, and they should remember at all times that physicians are not guarantors of their work—they only agree to bring to the patient such skill and knowledge as they possess, and to apply that skill and knowledge in accordance with the usual and ordinary practice of physicians in that or similar communities. If they honestly apply such knowledge and skill as they possess, and yet make a mistake or commit an error, they are not liable for malpractice, even though the patient may suffer as a result of such mistake or error.

Results Not Guaranteed

The law seeks to be fair in defining the standard of care and skill and does not require nor ask the impossible. In the absence of a special contract, a doctor is never considered as warranting a cure or guaranteeing that his treatment will result in a benefit to the patient. He is not responsible in law for want of success unless it can be shown to be the result of the lack of ordinary care and skill in the treatment of the case.

A patient suffering from an eye malady consulted a doctor, who operated on the eye. The patient alleged that following the operation she suffered great pain in the eye and finally lost the right eye entirely and suffered an impairment of the sight of the left eye. The court in finding for the doctor said:

"The naked facts that defendant performed operations upon her eye, and that pain followed, and that subsequently the eye was in such a bad condition that it had to be extracted, establishes neither the neglect and unskillfulness of the treatment, nor the casual connection between it and the unfortunate event. A physician is not a warrantor of cures."

Agents

Ordinarily, one is responsible for his own conduct only, but physicians may be legally charged with responsibility for injurious consequences resulting from the conduct of a third person by reason of his relationship to them. Probably a doctor's most frequent contact with others than those in his own office comes from his practice in hospitals. In this respect he is intimately associated with nurses, interns, and others employed to render the usual hospital care, and he is dependent upon their services. It is manifest that a hospital renders a professional service separate and distinct from that of a doctor and we are all familiar with the high degree of efficiency of the staffs of the modern hospitals of today. This requires that hospitals employ and train their own nurses, interns and orderlies to discharge the duties required of them according to the recognized technique in that community. Generally speaking, such employes are servants of the hospital and are not considered to be employes of the doctor treating the patient in the institution. From this comes the rule of law that an operating surgeon should not be held legally responsible for the negligence of hospital nurses or employes unless the hospital is owned or controlled by him. This proposition is frequently met in suits involving alleged negligence in postoperative dressing of wounds, hot-water bottle burns, use of the wrong or too hot solution in administering a proctoclysis, and innumerable other types of injuries. If the damage occurs from a negligent act of a hospital employe while performing a regular duty arising out of and in the course of his employment with the institution, as distinguished from the performance of some special act under the immediate direction and control of the surgeon, no liability attaches to the doctor.

We must point out, however, that the law deals largely with exceptions to the general rule and we find the courts enlarging or restricting this rule or its application in order to reach a desired result in a particular case. The prevailing opinion that charitable hospitals are not liable to patients for injury occurring through the negligent acts of hospital employes is a further impetus to courts to establish liability on the doctor, as a means of providing for the patient's financial recompense. Constant effort and vigilance are required to oppose the ever broadening responsibilities which courts are prone to place upon the medical profession to the relief of other agencies, such as nurses, hospitals and laboratories, all of whom contribute something to the intricate system of medical care.

In an attempt to properly recompense the pa-

tient some courts as early as 1923 adopted the so-called "Loaned Servant Doctrine." This doctrine held that employes under the doctor's direct supervision, even though he was unable to actually observe what they were doing, made him responsible; and even though they were hospital employes, they were considered as loaned to the doctor for the purposes of the operation. The first statement on this doctrine was as follows:

"While the head nurse and her assistants were the general employes of the sanitarium, they were, nevertheless, during the time required for the actual operation, under the direction and supervision of the operating surgeons, and were the servants of the operating surgeons in respect to such services as were rendered by them in the performance of the operation, and for any negligence on the part of such employes in the performance of such services the operating surgeons are liable."

It is questionable that under the present intricate proceedings used in performing operations that such a doctrine has any solid foundation on which to stand. Operations today are planned and organized and the various parties participating therein are trained especially for their duties and it seems unreasonable that the surgeon should be held liable for negligent acts of others who are not his employes, and over whom he can exert no supervision because he is using all of his time and effort on the very serious and involved details necessary in performing major surgery.

Generally, the responsibility for maintenance of equipment—operating tables, instruments, beds, etc., is upon the institution and the physician is not held liable for such equipment unless through exercise of ordinary care and skill he could observe some defect and would, therefore, be negligent in accepting the same.

All illustration of the above is a case which was heard some years back in Detroit:

A patient was having a carbuncle removed from the back of his neck. This required that he be placed face down on the operating table. As an electric cautery knife was to be used in the operation, it was necessary to place an electrode between the abdomen of the patient and the operating table. It was the custom for the resident to prepare the patient and the cautery knife in readiness for the surgeon. This was done by the resident while the surgeon was "scrubbing up" for the operation. The operation proceeded and when it was completed and the patient returned to his room, it was found that his abdomen was very seriously burned, apparently due to faulty contact of the electrode. A malpractice suit was instituted against the defendant surgeon. We were able to show that the resident placed the electrode in position so that the electric cautery knife could be used. We were also able to show that even if the surgeon had investigated to see that the electrode was in proper position, thereby rendering himself unsterile through having to move the patient, there was no assurance that while he was again "scrubbing up" the electrode would not become displaced. On the basis of the testimony and the fact that the resident was in the employ of the hospital and a part of his duties was to make the preliminary preparations for operations where the electric cautery knife was to be used, the judge directed a verdict in behalf of the defendant surgeon.

There are, of course, many exceptions to the general rules discussed here and cases could be cited indefinitely, but this gives a general picture of the situation as it exists at the present time.

Substitutes

Another situation in which the agency question arises is when a doctor takes a vacation or when his calls conflict so that he cannot be in two places at the same time. What arrangement is best under such conditions and what liability is imposed upon the doctor for the acts of one who substitutes in his place? This is of vital concern to the practicing physician and cases can be found to support many different points of view.

One of the earliest opinions in this country in which this question was decided was handed down by the Supreme Court of Michigan in 1878. In this case the action was against a surgeon retained by a railroad to treat its injured employes. While this surgeon was out of town an employe was injured. Before leaving town, the surgeon had notified the superintendent of the railroad of his impending absence and gave him the name of another doctor who could be called to treat any injured employes during his absence. When the injury occurred, the patient was referred to the doctor recommended by the company surgeon. When the surgeon for the railroad returned he took over the case. The question arose as to whether or not he was responsible for alleged negligent treatment of the case by the substitute doctor. The court said:

"It was right and proper that the physician of the company, when about to be absent for a few days, should inform the company of his proposed absence and recommend some other person to take his place, should occasion require, until his return. This would be equally true of a family physician about to go away for a short time. There would be nothing more natural

or proper than for him, before going away, to give notice of the fact and recommend some suitable person to be called during his absence. Yet no one would think of considering the person so recommended, if called, as acting under the employment of the physician who recommended him. It is not claimed that there was any express agreement between the two doctors under which the company physician agreed to pay the recommended substitute physician for any such services as he might be called upon to perform, and certainly the facts as appearing upon this record would not raise an implied promise."

Consent to Operations

A physician in performing any operation must have the consent of the patient, either express or implied, and certainly for the physician's protection it should be in writing. Physicians are dealing daily in matters that involve substantial sums of money. If something goes wrong, and there is but the implied or verbal consent of the patient, the doctor is taking a desperate chance. The patient can always change his mind or his testimony after a suit has been instituted. In my experience I have never found a bank that would loan money without taking a note from the borrower, no matter how well it knows him and no matter what an excellent reputation he enjoys. It seems to me that in the nature of things, written consents to operations are just as necessary, because the courts have generally held that an operation performed without consent is tantamount to assault and battery.

The courts have held that a man of legal age, although very ill, may consent to an operation and that it was not necessary to obtain the consent of his wife. They have also held that it is necessary to obtain the consent of parents before an operation can be performed on a minor. A case in Michigan a few years ago is of interest in illustrating this point:

> In that case the plaintiff, a normal boy of nine and one-half years, was taken by a school nurse to the City Physician on suspicion of infected tonsils. The City Physician sent him to a private hospital with a memorandum requesting removal of his tonsils. The boy was accompanied to the hospital by his fifteen-year-old brother and his tonsils were removed by the defendant in the case. The testimony showed that the parents did not know of the operation until it had been performed and their testimony also showed that they had repeatedly stated they did not want the child's tonsils removed. This, of course, was not known to the doctor as it was presumed by him that the parents were perfectly satisfied inasmuch as the City Physician had sent him for this operation. Tonsillectomy is ordinarily a simple operation, but in this case because of hemorrhage, the boy was kept in the hospital and in getting up during the night he fell and struck his head against some object and became totally blind. The court, after considering all of the facts involved in the case held that the operation was unlawful because it was without the consent of the plaintiff's parents and constituted an assault upon plaintiff, for which defendant was liable.

As can be seen from this case even the simplest matter may turn into very substantial damages.

The court made the following statement in another case which we think sets forth the law very clearly:

> "Where a patient is in possession of his faculties and in such physical health as to be able to consult about his condition, and no emergency exists making it impracticable to confer with him, his consent is a prerequisite to a surgical operation by his physician; and a surgeon who performs an operation without his patient's consent, express or implied, commits an assault for which he is liable in damages."

As I am writing this article, there is considerable publicity to the effect that many unnecessary operations are performed. In my experience, I can truthfully say that I have never run into such a situation, although undoubtedly that does happen on occasion. There are unquestionably unethical practitioners in the medical profession as there are in all professions, but we do not think that the few cases which may be turned up should indict the profession as a whole. Each case presents an individual problem and the surgeon must use his best judgment.

It would seem that it is better not to restrict the physician in the exercise of his best judgment, even if it later appears that a few operations which were performed may not have been necessary. If the doctor is to be so restricted, because of the possibility that if he is wrong he will have to respond in damages, he will be inclined to be extremely cautious, and that could result in necessary operations not being performed. There is a point where only the doctor can make the decision for or against an operation and if he uses his honest judgment there should be no penalty, even though it is later claimed he was mistaken in his decision.

For several years the writer gave a course in "Medical Jurisprudence" at the Wayne University College of Medicine. One of the questions given

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Psychiatry and the Courts

By George K. Swartz, M.D.

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THERE has been a definite need for the combined services of psychiatry and the legal profession in the prosecution of criminals. The legal and medical professions always have had much in common; both deal with the problem of human behavior, in caring for individual needs and the adjustment of individuals to the mores of society. The medical approach to this problem has been preventive, and the treatment of mental aberrations, while the legal interest has assumed a more protective role. The courts have adopted a paternalistic function, being both protective and punitive.

Since the time of their inception, the courts as a whole have functioned well. The Federal Bill of Rights has been our standard of conduct, guaranteeing our liberties. The courts of the land, through the power provided, have zealously guarded our individual liberties. The state mental health laws were written to conform with the Federal Bill of Rights—a part of our National Constitution, which declares and affirms that no one shall be deprived of his liberty without due process of law. This law was devised in order to protect individuals from being incarcerated without an open and just trial. In others words, no one is to be considered guilty and punished for guilt until he is proven guilty through a fair trial. There is a limitation on the time that a person may be detained. Even though our laws are just and excellent, they are not perfect. There have been times when these laws did not fit the occasion. As yet, no adequate way has been found to meet the emergencies that have arisen regarding the mentally ill. Periodically there are horror stories, reported in the news. We are told of demented persons who become killers, running berserk through the streets. A description of these killers usually points out that previous to their criminal outburst their behavior had been sufficiently bizarre that it had been noticeable to neighbors, and their sanity had been questioned. Because of our adherence to our principles of liberty for all, these individuals are permitted to go their way unchallenged. No examination is made to determine sanity until such a person has committed some misdemeanor, felony, or crime.

In this matter it would appear that the laws have been static or reactive. Certainly, with our collective inventive ingenuity, some means or variation of the law could be devised in order that a demonstration of abnormal behavior would at least call for an investigation. The individuals with the abnormal behavior could be examined and kept under observation until it is established whether or not they have ideas or attitudes that might result in harm either to themselves or to others. Another way in which the courts appear to have been rigid in their interpretation of the law is their insistence of a jury trial for the committing of the insane persons to a mental institution. The assumption is that the individual is being deprived of his liberty against the wishes of the individual (which may or may not be altogether true). It may be merely that the courts are fulfilling a ritual in complying with the "due process of law." The letter of the law must be carried out and that, in the mind of the court, is the chief requirement.

The last fifty years have seen our population doubled. During that time cities and villages have grown. Suburbs have come into being and the congestion of humanity has multiplied. Should this growth continue until the end of the century, certain definite regulations will have to be provided to better handle thickly populated areas. Provision will have to be made for a closer supervision of the mentally abnormal in our population. At the turn of the century our people were more independent socially and economically. Each family and community was independent, almost entirely unto itself. Then, when a member of a family showed "queer traits," they were placed in a secluded area of the home and cared for by the family. Today, with smaller homes, less help, and less independent family groups, those persons who show abnormal behavior must be hospitalized early. These economic and social factors make it appear that liberalization of restraining laws should be provided in order that greater expediting may be accomplished in the hospitalization of the mentally ill.

Another means for protecting the individual from being deprived of his liberties is the Writ of Habeas Corpus. This writ seldom, if ever, need be used, as it was originally intended. A law that demands the presentation of a body at the

call of the court, in the case of the mentally ill, is seldom if ever needed. Possibly, in the past, such cases occurred, but today it is practically impossible for the insane to be held as hostages, after they have regained their sanity. Probably, years ago, when the so-called "normal" population was more sadistic in its attitude toward others, keepers of the insane could use them for a source of revenue by providing a perverted type of amusement. Today, mental hospitals are overcrowded. The least attendant at an institution is able to advance his opinions publicly, regarding patients and their treatment. It is practically impossible, today, to hide away a mentally sound person, and there are few, if any, who would risk a highly improbable scheme of this sort, trying to banish or sequester someone for a price or a ransom.

Most mental hospitals are under the supervision of a State Department of Mental Hygiene. The question then arises why the courts, and some judges, still insist that the ill present themselves in court for commitment. Prior to the establishment of State Departments of Mental Hygiene, it would seem that precaution should be taken, but now, under state supervision, there is little risk of irregularities. The courts do have the choice of not requiring the insane to appear in court, if it is considered harmful or detrimental to the health of those applying for committment. Frequently, the court procedure is very distressing to the individual and only in extreme circumstances should a patient be required to appear in person.

In investigating and supervising individuals, the courts want the truth. To whom can they turn for assistance, regarding health problems, but to the medical profession. Psychiatrists are well trained in their branch of medicine, but yet, at times, in court they appear to be inaccurate and lacking in agreement. There have been minor differences because of a lack of standardization. Heretofore, our psychiatric ideas were based upon European concepts. Gradually, an American School of Psychiatry is being established, and with it there will be a uniformity of definitions. There will be none of the semantic differences that occur in the translation from one language to another. Before psychiatrists can be completely effective in the courts there must be a standard language describing the components of disease and resultant anticipated actions and reactions of the mentally ill. The court seeks and needs information regarding competency. Whether or not the person is able to protect himself and his property judiciously, is information the court must have. Another loophole in our supervision of the mentally ill is that no guardians are appointed until after a petition has been asked to declare an individual mentally ill or weak-minded. In cases where mental deterioration has gradually progressed, accompanied by loss of insight and judgment, fortunes may be squandered or loosely arranged contracts drawn, before legal protection can be arranged.

There is the general impression that the feeling between the medical and legal profession has not been co-operative. It has been advocated that effort be made to improve this association. There are rumors that the legal profession has not looked kindly upon having members of the medical profession in court. The medical profession has resented the attempts of the legal body to "trip them up" while testifying in court. These divers attitudes can be changed if there is a sincere effort to correct past conduct. The following suggestions would seem indicated, viz.: While in court, the physicians should remain scientists, and not attempt to take over the work of the lawyers. They should remember that their duty is not to try to influence the court, but only to present the facts. When several physicians are testifying, they shall be in agreement as to diagnosis and prognosis. To accomplish this, it might be necessary to discuss the case before the hearing and arrive at a similar opinion, so that there will be no differences in court in spite of the protests of opposing lawyers. There should be a uniformity of meaning and definitions. The language used should be chosen carefully so that it can be understood by every juror present.

During a discussion of a case, there should be no open disagreement between members of the medical profession. If, and when, members of the medical profession deport themselves in that manner, they have reason to expect to be accepted more graciously by the legal profession in court. The members of the bar will cease being on the defensive and lose their aggressive attitude, knowing well that there is no hiding or clouding of the facts.

The greatest problem of the courts is to arrive at a correct estimate of the intellect and emotional stability of those arrested on a criminal charge. There had been a growing belief that the main

bulk of the criminals were either defectives, constitutional psychopaths, or pyschotic. The question kept arising, which should be detained in a penitentiary and which in mental hospitals. There had been much surmising, but no actual facts, until in 1921 when there was enacted in Massachusetts, the Briggs Law. This law was acclaimed as an important piece of legislation. It provided for the investigation, by an impartial psychiatric examination, of those accused of serious or repeated crimes. This law was intended to stop the flow of ricidivists of penal institutions, recognize the importance of attempting to understand a chronic offender, and make available to the courts impartial psychiatric opinion, before the state had gone to the expense of a trial. Weihofen[8] reported that the statutes in at least twenty states and the Federal Rules of Criminal Procedure now expressly authorize the trial courts to appoint medical experts to examine the defendant and make a report.

Regarding certain sexual perversions, there are divers opinions among psychiatrists as to their baneful influence on society. Rickles[6] classifies exhibitionism as a profound neurosis, with little if any harmful influence, and with no assaultive tendency on the part of the exhibitionist. Voyeurism is a frequent symptom of schizophrenia and mental deficiency. In several European countries homosexuality is no longer classified as a punishable offense. A certain number of biologists are of the belief that homosexuality is a constitutionally determined condition and not the result of exposure or experience. There has been considerable discussion, with the matter unsettled as to the etiology of the constitutional psychopath. Penitentiary populations contain many criminals who have been classified as psychopaths. The question remains whether the psychopath's acts, which are sometimes violently antisocial and criminal, are the result of subconscious compulsions. Up to the present time they are held responsible for their acts and consequently do not come under the M'Naughton Rules. Occasionally, there is need for the examination of a plaintiff. It is especially imperative when a child or woman accuses some male of spurious sex advances. The shades of the Salem Witchcraft still linger in the wings of the drama of society.

The essential points of the M'Naughton Rules are, viz.: To establish a defense on the ground of insanity it must be clearly proved that at the time of the committing of the act the party accused was laboring under such a defect of reason from disease of the mind as not to know the nature and quality of the act he was doing, or if he did know it, that he did not know he was doing what was wrong.

After enactment of the Briggs Law in 1921, several studies were made of the findings of that law. In 1935, W. Overholser[5] pointed out between 10.6 per cent and 25.7 per cent of those arrested on criminal charges, showed mental abnormalities.

A case study[1] from the files of Sing Sing Prison, of 102 sex offenders of various types, showed that none could be classified as normal.

M. Guttmacher,[2] in an article on the medical aspects of the causes and prevention of crime, stated that from a fifth to a third of the offenders showed important psychiatric abnormalities.

P. Hagopian[3] analyzed the findings of 6,591 cases in Massachuetts. All of these cases were subsequent to the enactment of the Briggs Law. It was learned that of these criminals, 98.7 per cent were male, 1.3 per cent were female. The type of offense ran the gamut from murder to bootlegging, and impersonating an officer. There were 620 sex offenses— or approximately 10 per cent, and of these offenders 97.9 per cent were male, 2.1 per cent were female. In the examiners' opinions, of the total number of cases in this study, 5,339 (81 per cent) of the accused did not suffer from any mental defect or disease. The opinions expressed regarding the remaining 1,252 (19 per cent) were classifiable in the following manner:

Definitely psychotic, 82 (1.2 per cent).

Recommended for observation in a mental hospital, because of mental symptoms, 403 (6.1 per cent).

Feeble-minded, 361 (5.5 per cent).

Borderline, 353 (5.4 per cent).

*Other conditions (psychopathic sexual), 53 (.8 per cent).

Any group of criminals, of which 19 per cent show mental abnormalities, should be enough to convince those interested that laws similar to the Briggs Law should be enacted by all of the States.

Lebensohn,[4] in a thoughtful article, makes a plea for a closer rapport between psychiatrist and

*Usually psychopathy is not recorded because, as previously stated, psychopaths are held responsible for their acts.

lawyer. He believes that there is mutual distrust and suspicion. He attributes these reactions to ignorance of each other's functions, objectives, and basic philosophy, and urges wider dissemination of knowledge as a remedy. This attitude appears to be a healthy approach to solving the problem, but there are other means that could help rectify the matter.

In the study of psychiatry, and in psychiatric textbook material, emphasis, as it should be, is on psychopathology, diagnosis and treatment. There are short chapters on sensorium, intellectual resources, judgment and insight. Chapters on the subject of the investigation of criminals will need to be incorporated in all standard textbooks.

The courts are not interested in diagnosis. They are interested only in whether or not there is evidence of mental abnormality. They want to know the degree of competency, responsibility or accountability. They do not want to hear a lot of irrelevant medical phraseology or terminology. On the other hand, the testifying physician does not enjoy being irritated by a categorical "yes" or "no" answer to a question demandingly put to him by a prosecuting or defense attorney, when the question cannot be honestly answered by a simple "yes" or "no."

Too often there is the sorry dilemma of an accused man being legally sane, but medically insane. Now what is the solution to this problem? E. Strecker[7] offers several solutions. He believes that the M'Naughton Rule is archaic. The determination often rests on the flimsiest criteria. He believes that through the co-operation of legal and medical societies in various sections of the country, panels of competent psychiatrists should be formed; the psychiatrist being willing to serve at the request of the judge in any given case, and with the consent of the prosecutor and defense council. Such impartial testimony could not be suspect, and it would carry great weight. His second plan would have to be implemented by new legislation. In it, psychiatric experts would examine an accused thoroughly. He (or they) would observe at a trial, but would not testify. The guilt, or innocence, would be decided by the jury, judge, prosecution, and defense. Then the psychiatrist would be authorized to have an important voice in the decision concerning the degree of responsibility, and the nature of the corrective punishment, or treatment.

Another plan that might be devised would be to have representative committees from the American Bar Association, the American Medical Association, and the American Psychiatric Association, formulate rules and plans for the examination of criminals. This examination would be sufficiently comprehensive to satisfy the courts regarding mental impairment, competency, responsibility, and accountability. Qualified psychiatrists would make the examinations in an impartial objective manner, and the report would then be sent to the judge assigned to the case, to be used by the court in arriving at a verdict and the type of treatment or punishment that should be handed down. Whichever method is chosen, it will improve relations between the legal and medical professions, and justice may more accurately be meted out.

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MEDICAL CARE COSTS

In a sample survey of sixteen cities of different sizes, U. S. Bureau of Labor Statistics has found the *moderate-income* families contacted spent between 4.7 per cent and 6.4 per cent of their total expenditures on medical care. The study, made in 1950, is part of a larger survey of spending in ninety-one cities which the BLS conducted in connection with a revision of the government's cost of living index. The index will be changed starting next January, bringing it more in line with present-day spending habits. Some 16,350 families were checked in the ninety-one cities. The survey listed the following percentages: New York City, 5.9; Chicago, 5.2; Los Angeles, 6.1; Philadelphia, 5.1; Boston, 4.7; Pittsburgh, 4.7; Minneapolis, 5.7; Kansas City, Mo., 5.1; Portland, Ore., 5.2; Canton, O., 5.1; Charleston, W. Va., 6.0; Lynchburg, Va., 6.4; Grand Forks, N. D., 4.7; Ravenna, O., 4.8; Pulaski, Va., 5.4; and Madill, Okla., 4.7.

In commenting on the sixteen-city survey on medical care spending, BLS cautioned that the sampling in some localities was small and that it excluded *upper-income* and *rural* families.

Provisions of the Michigan Laws Regarding Adoptions

By Barrett Lyons
Lansing, Michigan

THE PLACEMENT of children for adoption is subject to various laws and regulations designed to protect the legal rights and the well-being of all of the persons concerned, but primarily those of the children.

Many physicians at some time or other will be asked by a mother to find an adoptive home for her baby, or by a childless couple to find a child for them. Since physicians are not always aware of what their rights and legal responsibilities are in relation to such requests, this article is intended to outline the various possibilities. This is followed by a discussion of current practices which are questionable and concludes with a statement of certain clearly illegal activities in which the physician may unwittingly find himself involved.

The Michigan adoption law[1] recognizes two ways in which a child may be placed for adoption:

1. The natural parent or parents or the child's legal guardian with the approval of the probate court may make a direct arrangement with the adopting parents to place the child with them.

2. The juvenile division of the probate court which has through legal process taken custody of the child, or an authorized private or public child-placing agency to which the child has been committed by the court or released by the natural parents, may place the child for adoption. When the placement is made by the court or by an agency, the natural parent need not know where the child is placed.

An authorized private agency is an agency licensed[2] by the State Department of Social Welfare to place children in foster homes.[3] The Michigan Children's Institute at Ann Arbor is the only public child-placing agency authorized to place children for adoption.

Whether the child is placed by his parent or guardian, by the court or by an agency, the adoption statute prescribes that certain procedures must be followed. First, before accepting the child into their home the adoptive parents must file a petition with the probate court. If after investigation the court finds that the home is suitable, that the child is physically and mentally a proper subject for adoption and that "the best interests of the child will be served by such adoption," an order is made terminating parental rights and authorizing placement of the child. One year after this order, the court may make the order completing the adoption. This one-year period may be waived by court order "if the best interests of the child will be served thereby," or may be extended if circumstances make this desirable. When placement is made by an authorized child-placing agency, the agency gives supervision during this waiting period and shares responsibility with the adopting parents and the court if anything goes wrong before the adoption is completed.

There are two ways in which the physician may legally act as the go-between for the mother of the child, and the foster parents, without the mother knowing who the latter are. The first possibility is to become the guardian of the baby. Such a guardianship is legally possible, generally speaking, only when the baby has "no father or mother living, competent and suitable to have the custody and care of the education of such minor."[4] However, this language covers most of the situations where the mother wants to have her child placed for adoption. The physician may make application in the probate court to be appointed guardian of the child, requesting in his petition the right to consent to an adoption. Immediately thereafter the family he has chosen as parents for the baby should petition the probate court for adoption of the child and file with the petition the consent of the physician to the adoption. After the court is satisfied as to the propriety of the proposed adoption, it would issue an order terminating parental rights and the guardianship. However, in the interim, this type of action places full responsibility upon the physician for deciding to act in the interest of the baby.

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1. The adoption law. Chapter X, Act 288, P. A. 1939, as amended. (Chapter 710, C.L. 1948, as amended.)
2. The child-placing agency and foster home licensing law. Act 47, P. A. 1944, First Extra Session, as amended. (Sections 722.101-722.108, C. L. 1948, as amended.)
3. There are sixty-eight licensed child-caring agencies, but not all of them are licensed to place children for adoption. A directory of the licensed agencies is published by the State Department of Social Welfare.
4. Section 1 of the guardianship law. Chapter III, Act 288, P. A. 1939, as amended. (Chapter 703, C.L. 1948, as amended.)

The other method, not known ever to have been used in Michigan, is somewhat similar. The physician would apply to the Department of Social Welfare for a license to be an authorized child-placing agency. The department maintains standards for child-placing agencies which the physician would have to meet, but once licensed, he would be able to have babies released to his custody by their mothers and to place them for adoption. The court procedure thereafter is the same as above.

A third variation is possible in a few counties where the judge of the juvenile court is willing to accept original as well as final responsibility for the placement upon the recommendation of the physician. In this situation, the physician asks the judge to accept a petition in juvenile court[5] from the mother to take jurisdiction over her child in order to place it in a home selected by the physician. The judge must then have an investigation made, and after such investigation, he himself can have the baby placed and consent to the adoption. However, most judges have lists of approved homes waiting for the placement of children and feel that the physician should not attempt to substitute some home the physician has selected.

Each of these methods is designed to protect the social and legal rights of the child. The physician acting under the first two would be responsible for the child and, in a sense, to the child. Under the law the best interests of the child and not those of either set of parents are paramount.

However, sometimes a physician in ignorance of the law or in the effort to avoid these legal steps resorts to a questionable practice. In this situation, he selects a home for a baby, instructs the foster parents to petition for the adoption giving them all the details necessary to make the petition, and then secures from the mother a direct consent for the adoption of the child while concealing from her the names of the adopting parents or at least their address. In some counties the practice has become common if the probate judge has permitted it. Some physicians have been led to believe that if no money changes hands, there is nothing illegal about it. However, the law states clearly that "No person other than the parent or guardian of the person of a child or one related by blood or marriage, and no firm, corporation, association or organization, or agency thereof, other than a licensed child welfare agency or a governmental unit may place any child in the control and care of any person or place such child for adoption."[6]

In some cases the physician, in the apparent belief that if the mother herself delivers the baby to the adopting parents the requirements of the law are satisfied, has arranged for the foster parents to come to his office or to the hospital to receive the baby from the natural mother, without first taking the necessary legal steps to bring the baby within the jurisdiction of the court and secure authorization for its placement in the adoptive home. Although in this instance the doctor may have protected himself because technically the baby was placed by the natural mother, the foster parents have taken a child into their home in violation of the statutes. When they go to the court to start adoption proceedings, this will be a barrier. Or there may be other legal impediments to the adoption; for example, the child of a married woman may not legally be adopted until the parental rights of her husband have been terminated either by release or by a court order, even though he is not the natural father. And when the case finally gets to the court for action, the mother may have changed her mind about releasing the baby. On the other hand, if she has disappeared, the court must acquire jurisdiction through a petition under the juvenile code alleging that the baby is without proper care and guardianship, which may present complications. In the meanwhile, the baby remains in the foster home with no one legally responsible for him, sometimes no one even knowing with certainty who he is.

Other actions which the physician may take without being aware of the illegality of his acts include the following: He may suggest to a financially needy, pregnant girl that he will be glad to provide his services gratis (or that he knows of a good family who will be willing to pay for them) if he (they) may receive the baby. The adoption statute provides that "No person or persons shall offer, give or receive any money or other consideration, or thing of value in connection with the placing of any child for adoption or in connection with the consent to adoption, or with the petition for adoption except such charges and fees as may be approved by the probate court." Thus, offering a consideration (either money or services) to the mother for the placement of her child be-

5. Chapter XIIA, Act 288, P. A. 1939, as amended. (Chapter 712A, C. L. 1948, as amended.)

6. Section 7 of the child-placing agency and foster home-licensing law.

fore approval of the court is secured is clearly in violation of this statute.[7]

Sometimes an expectant mother agrees with the physician that the child is to be placed and tells him that she does not wish to see her baby, and the doctor so instructs the hospital. There is nothing in the law requiring a hospital to honor the doctor's order not to show the baby to its mother, and if the mother changes her mind this is an unenforceable agreement. It is probable that the mother could recover damages if the hospital attempted to carry out a physician's order in this respect. Only the judge of probate of the court which had taken jurisdiction of the child would have the right to make such an order.

As a corollary of the above two paragraphs, it is evident that it is highly improper for a physician to use the fact that the prospective parents have paid money as an argument to persuade a mother to carry out her original agreement to give up her child.

One serious evasion of the laws designed to protect children available for adoption occurs when a mother enters the hospital wearing a wedding ring and giving her name as that of the prospective foster mother. While this does create a birth certificate which purports to show that the baby is the child of the would-be parents, it does not actually create the relationship and can result in the child's being removed from the foster parents several years later for the reason that they have no legal rights. Sometimes this deception occurs without the knowledge of the physician but suspicion will always rest on him; thus he should be especially careful always to require identification of his maternity patient if there is any reason to be uncertain about it.

One other statute which is of interest to physicians is the act which requires all maternity homes, and hospitals and clinics offering maternity services to be licensed by the State Department of Health.[8] One provision of this act requires the licensee to report by memorandum separate from the birth certificate certain social information regarding illegitimate babies born on the premises, and about all other babies born there if the mother indicates that the child is to be placed. It is illegal for the physician to interfere in this process since these memoranda provide the state with its means of determining that babies have not been disposed of improperly. The law provides that the State Department of Social Welfare assist in this determination. In respect to this law physicians whose connection with any home or hospital is an administrative one should be aware that "No employee or officer and no member of a governing body of any such hospital" (unless the hospital is licensed as a child welfare agency) "shall engage in any activity in connection with placing a child for adoption nor shall such person give out any information about unmarried mothers or their children to any unauthorized person to assist in placing a child for adoption."

The State Department of Social Welfare will be glad to furnish any physician upon request complete copies of the first four laws quoted in this article and of the list of licensed agencies. The fifth law is available from the Health Department. The medical profession is certainly as deeply concerned in assuring effective legal and social protection for children to be placed for adoption and for would-be foster parents as are courts and the public and private child welfare agencies. Such objective includes the providing each adoptable child with a home suited to his particular needs. All this cannot be obtained for all children unless all laws are scrupulously adhered to without exception. By so doing the medical profession will be able to assist in the improvement of the laws to the end that finally only persons genuinely concerned with the rights of children and able to take the responsibility necessary to protect these rights may play any part in placement.

STATUTORY PROVISIONS

1. *The Adoption Law.*—The legal procedures for the adoption of children are set up in Chapter X of the Probate Code.

The first step in the procedure is the filing of an adoption petition by the person or persons wishing to adopt a child. The second step is the signing of a consent to the adoption by the natural parents, unless their rights have been terminated by court action or unless the child has been released by them to a licensed child-placement agency. If the child is a permanent ward of the court no consent is necessary. If the child is in the custody of a placement agency, either by voluntary release from the parents or by court order, a duly authorized representative of the agency must sign the consent.

The probate judge must then order an investigation by the county agent or probation officer, by a licensed-placement agency, or by the State Department of Social Welfare. A written report of this investigation must be filed with the court. If the judge is satisfied as to:

7. Section 13 of the adoption law.
8. The maternity hospital licensing law. Act 263, P. A. 1913, as amended by Act 231, P. A. 1951.

(a) The genuineness of consent to such adoption and the legal authority of the person or persons signing such consent.
(b) The good moral character, ability to support and educate such child, and the suitableness of the home of the person or persons adopting such child for said child.
(c) The mental and physical condition of the child as a proper subject for adoption in said home, and
(d) That the best interest of such child will be served by said adoption.

an order must be entered making the child a ward of the court.

Only after this is done may the adopting parents legally take the child into their home. Section 12 of Chapter X of the Probate Code reads as follows:

"No child shall be placed in any home for the purpose of adoption until an order terminating parental rights and making the child a ward of the court as herein provided has been entered."

One year after the child has been made a ward of the court, the final order of adoption may be entered. This waiting period may be waived if the court finds that the best interests of the child will be served thereby.

2. *The Boarding Home Law.*—Act 47, P. A. Michigan 1944, First Extra Session, which supersedes a similar Act originally adopted in 1913, requires agencies placing children in family homes for adoption or for boarding care to be licensed by the State Department of Social Welfare. It also requires any private home caring for children not related by blood or marriage to be licensed. Section 7 of this statute reads as follows:

"Placement of children in family homes. No person other than the parent or guardian of the person of a child or one related by blood or marriage, and no firm, corporation, association or organization, or agency thereof, other than a licensed child welfare agency or a governmental unit may place any child in the control and care of any person or place such child for adoption."

3. *The Maternity Hospital Law.*—Act 263, P. A. 1913, as amended by Act 231, P.A. 1951, requires the State Health Commissioner to license and regulate maternity and lying-in hospitals in order to assure "the physical and social protection of new-born children." This Act includes the following:

"Every licensee shall keep a register wherein shall be entered the full name and address of each person admitted, the date of admission, the date of birth of every child born on said premises, and such other information as the state health commissioner may require. Every licensee shall also keep a memorandum of the name, age, color and sex and other social information the mother wishes to divulge of every child whose mother has indicated to the licensee or his agent a desire to place such child in foster care, or of a child who was born to an unmarried mother, and shall cause a correct copy of such memorandum to be sent to the judge of probate of the county wherein such hospital is located, if he so requests, and to the state health commissioner within 48 hours after such child or its mother leaves the hospital. The state health commissioner after consultation with the state department of social welfare shall prescribe and furnish each licensee with the forms of records and memoranda herein mentioned. In no case shall any child be placed in any home for foster care or adoption, on trial or otherwise, by any licensee under the provisions of this act, nor in any case unless licensed to do so under the provisions of Act No. 47 of the Public Acts of the First Extra Session of 1944, being sections 722.101 to 722.108, inclusive, of the Compiled Laws of 1948. No employee or officer and no member of a governing body of any such hospital shall engage in any activity in connection with placing a child for adoption nor shall such person give out any information about unmarried mothers or their children to any unauthorized person to assist in placing a child for adoption. The state department of social welfare shall assist in the enforcement of this section and for this purpose may review the said registers and memoranda required by this section."

MALPRACTICE AS SEEN BY A LAWYER

(Continued from Page 405)

on an examination created considerable comment among the class and it seems as though it might be appropriate to recite it here. Although the facts set forth in this question are almost identical with those in a case that arose several years ago, we have changed them a little to bring out additional points. The question of legal liability; the question of ethics; the question of public policy; the question of consent to the operation, and the question of unnecessary operation, are all brought into play.

We shall not attempt to answer the question, but merely set it forth for your consideration.

"A," a sixteen-year-old boy, is attending a summer camp for boys in Northern Michigan. "B," a third-year medical student, is employed as a supervisor at the camp. "A" is taken seriously ill and Dr. "C" is called from a nearby town to treat him. The medical student, "B," examined "A" and determines that he was suffering from an acute attack of appendicitis and should have an immediate operation. Dr. "C," after examination, agrees to that diagnosis, but he refuses to operate until he can get the consent of "A's" parents. An attempt is made to get their consent, but it is found that they are out of the state for a week-end and cannot be reached. A try was made to get another doctor for consultation, but without success. "B" insists that the doctor operate, but he refuses and "A" dies from a ruptured appendix. Is Dr. "C" liable in damages and if so, why?

The Lawyer and the Physician Examine the Question of Traumatic Carcinogenesis

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INCREASING PUBLIC concern with cancer is bringing new problems to the legal and medical professions. That these spheres of interest impinge and overlap in at least one aspect can be seen in cases in which suit is brought to recover damages for the induction of cancer by trauma. One such case is now in the process of litigation at the time of preparation of this paper.

Cancer is now branded as public health enemy Number Two, second only to cardiovascular disease in the number of deaths each year. A small but important portion of the cancer problem is concerned with the possibility of the induction of neoplasm after trauma.

Exploration of this problem necessitates the formulation of basic definitions and approaches to implement a common understanding. "Trauma, a wound; a bodily injury produced by violence,"[11] is expanded by implication to include physical, chemical, thermal, electrical, and ionization forces which may cause damage to the body. Carcinogenesis is the process of inducing fundamental alteration in cells resulting in malignant or cancerous change which eventually destroys the host from whose tissues these cells were derived.

Methods of investigation of the relationship of trauma to the induction of malignant neoplasm are limited. Although man is the principal subject, our humanitarian scruples prevent the use of man for direct experimental investigations, since these would entail calculated destruction of human life. Therefore, the historical medical approach must be used; i.e. the accumulation of clinical observations, the application of the talents of clinicians, pathologists, roentgenologists, physicists and chemists to the common problem; the statistical analyses of these findings, and the ultimate clarification or substantiation of these impressions by controlled animal experimentation. Such conclusions as are reached, by virtue of the nature of the problem, cannot be expressed as mathematical formulæ, but rather as significant trends, i.e., not all roentgenologists ultimately develop leukemia, but it is nine to ten times as frequent in this group as among physicians in general, hence a significant trend.

As Medicine must assume its responsibility to mankind in controlling the ever-increasing number of carcinogenic substances in common use, so it would seem that the Law must be equally concerned with the equitable regulation of conflicting human interests in this field.

The most common and simplest aspect of this question deals with the possibility of physical trauma, acute or chronic, to stimulate carcinogenesis at the local site. Investigators of this problem are in general unanimity that physical trauma —as a blow or repeated blows to an area—is not a cause of cancer formation.[3]

The more complex factors surrounding trauma —other than simple mechanical injury such as a blow or contusion—necessitate careful scrutiny. Clinical reports from competent and independent physicians from widely separated sectors of the world draw attention to the following observations:

(a) An unusually high incidence of lung cancer among the miners of radioactive ore in Eastern Germany.
(b) An historical interest in scrotal cancer in chimney sweeps in England.
(c) An unusual frequency of bladder cancer among certain dye workers.
(d) A statistically significant increase in lung cancer among chromate and asbestos workers.
(e) An increase of skin and scrotal cancer in some groups of shale oil workers.
(f) An increased incidence of skin cancer and leukemia from prolonged exposure to electromagnetic energy.
(g) An increased incidence of leukemia following atomic bombing.

Investigation of the carcinogenetic capacities of chemicals and electromagnetic energy indicates that about 169 of 700 chemicals tested so far are carcinogenic in the broad sense of inducing tumor, and that electromagnetic energy in the form of chronic x-ray exposure may induce neoplastic changes in the skin or mucous membranes.[4]

There is well-established evidence for the recognition of cancer of the lung as an occupational

hazard of the miners of Schneeberg and Joachimstal.[12] However, the unexpectedly high incidence of primary lung cancer is not limited to a small segment of miners working with radioactive ore. The same grave problem has been detected in statistical analyses of other industries. Gregorius presents data on deaths from lung cancer in chromate plant workers in the six major chromate producing companies in America.[7] These data indicate that lung cancer occurred seventeen to eighteen times more often in employes of these plants than in the general population as shown in the Metropolitan Life Insurance Company statistics. Further breakdown of these data tends to incriminate the monochromates as the carcinogenic factor. In 1947, analysis of vital statistics indicated that cancer of the lungs or pleura was the cause of death in 13.2 per cent of 235 recorded deaths of asbestos handlers. In this survey, the incidence of lung malignancy was found to be ten times greater in asbestos workers than in the general population.[13] Subsequently, it was felt this hazard was removed by improved ventilation of the plants. Important as these industrial instances of lung carcinogenic hazards may be, they alone do not explain certain highly disturbing recent trends in cancer morbidity and mortality. Hammond points out that cancer was eighth in the list of causes of death in 1900, with 64 deaths per 100,000 population and second in 1948 with 135 deaths per 100,000 population.[8] Cancer death rates per 100,000 population by age groups are as follows:

Age Group	*Death rates per 100,000*
30-35	22
50-55	216
70-75	860

Further analysis of vital statistics for cancer death rates by sites for white males per 100,000 population indicates that cancer of the respiratory system, excluding the larynx, increased from 4.5 plus or minus in 1933 to 16.5 plus or minus in 1948, a far greater percentage increase than occurred in other forms of cancer. This increase is definitely greater in males than in females, and it occurs in all sections of the country and in most other countries which maintain reliable vital statistics.

Additional information is needed to explain, if possible, this pattern. Wynder presents evidence incriminating tobacco smoking as a carcinogenic agent in primary bronchogenic carcinoma.[15] Although exogenous factors and some occupational exposures—even in the rather remote past—may play a role in lung cancer, they can by no conceivable means explain the general increase in this disease. Analysis of the habits of patients with lung cancer reveals an almost universality of the smoking habit—particularly of heavy or chain smoking. Similar general conclusions were reached independently in the British study by Doll and Bradford Hill. The risk of development of primary bronchogenic carcinoma was estimated from these studies to vary directly with the amount of tobacco smoked.[16]

From the preceding reports and the evidence that bronchogenic cancer is statistically encountered in greater than anticipated frequency in workers exposed to tar fumes, mineral oil mists, chromium dusts, nickel-carbonyl vapors, arsenic dusts and fumes, asbestos dust, isopropyl oil vapors, and radioactive gases and dust, the following criteria for establishment of suspicion of industrial trauma inducing pulmonary carcinogenesis may be considered:[9,16]

1. The suspected occupation should manifest a markedly higher frequency among lung cancer patients than among other patients.
2. The suspected occupation should have a higher than anticipated incidence among all cases of lung cancer.
3. The suspected occupation should be found among those cases of lung cancer who have been non-smokers or nominal smokers.

In the individual presenting the complaint of occupational trauma and cancer, the following criteria may be considered germane to the question:

4. That reasonably recent pre-employment history, medical examination, and, if indicated, chest x-rays indicate freedom from pre-existent pulmonary lesions.
5. That the worker be actually exposed for an adequate time to reasonable concentrations of the carcinogenic substance to permit the induction of carcinogenesis.
6. That the lung cancer in the individual be proved by acceptable pathologic study.

It is significant that the guide of past experience would suggest that the time factor of Item 5 would be in terms of years, and that we have no reliable

standard as regards concentration of the offending agent. It is equally important to consider that individual susceptibility may markedly affect the above.

Routine or periodic cytologic sputum examinations by the Papanicolaou technique on workers in suspected industries should prove to be an effective method of screening employes and of making early detection when curative surgery may be performed.[2] This procedure may be positive where bronchoscopy fails, and it also eliminates the objection to routine bronchoscopy.

Observations from industries of Italy and France cast light on the carcinogenic property of certain dye chemicals on the urinary bladder. Barsotti and Vigliani found statistically significant increased frequency of bladder cancer, papillomas, and congestive lesions in the bladders of workers in dye stuffs plants.[1]

From their meticulous observations, they conclude that benzidine base and beta-naphthylamine have the highest carcinogenic power of the dyes studied; that open systems of processing and handling these materials are especially hazardous; that the minimum time of exposure for a tumor to appear was four years and the maximum twenty-eight years; and that the maximum period between cessation of exposure and the diagnosis of tumor was twenty-eight years. Truhaut surveyed the same problem and reported that among the carcinogenic pure chemicals are those that have the capacity for inducing malignant tissue change at a distance from the portal of entry.[14] The predilection of the azo group to affect the liver and the aromatic amine group (beta-naphthylamine) to affect the urinary bladder is a peculiarity perhaps due to the facts that these are simpler molecules than the polycylic hydrocarbons and the selective action at certain sites may represent the action of metabolites of these substances. The latent period of six to twenty-five years between exposure and the development of bladder tumors necessitates that many physicians re-examine their previous time concepts; it also may well suggest some changes in the legal structures as regards the statute of limitations.

Evidence is gradually accumulating that the release of energy by nuclear fission may constitute a carcinogenic hazard under certain conditions. Glücksmann concludes that from considerations of dosage and general radiosensitivity, four preferential sites of tumor induction or carcinogenesis may be expected after exposure to external radiations:

(a) Skin cancers due to the greater absorption of soft radiations by the skin.
(b) Leukemia because of the great radiosensitivity of the blood-forming system.
(c) Lung cancer after the inhalation of radioactive particles.
(d) Osteosarcoma after the ingestion of radioactive substances.[6]

Three distinct mechanisms by which external radiation could possibly induce tumor formation require careful consideration:

(a) The direct carcinogenic effect with the induction of tumors in the localized normal region.
(b) Co-carcinogenic effect in which radiation combines with other predisposing agents to precipitate carcinogenesis.
(c) The remote effect as a result of single or multiple whole body exposures to radiation inducing a systemic reaction as leukemia or experimental mouse ovarian tumor. It is also conceivable that the remote effect may shorten the latent period of spontaneously arising tumors.

Further confirmation of this potentiality of atomic energy is found in the report of Folley, Borges and Yamawaki, who found a significant increase in the incidence of leukemia in the exposed population of Hiroshima and Nagasaki as compared with the nonexposed populations of the two cities.[5] The observed effect occurred in subjects exposed within 2000 meters from the hypocenter of the atomic bomb explosion. These authors conclude that radiations from the atomic bomb explosions at Hiroshima and Nagasaki are potent leukemogenic agents in man.

The summing up of the reports presented in this paper suggests a significant trend toward increasing utilization of carcinogenic substances with the growth of modern industry and technology. Industry, in addition to asking itself "Is this substance or process essential, effective and economic?" should be prepared to answer the question pertaining to the health of the worker, "Is the substance or process non-toxic and non-carcinogenic?" Failure to evaluate properly the latter

question may well subject the industry to punitive legal action. Sufficient experience with occupational cancer has been accumulated to demonstrate that, given proper conditions and length of exposure to a potent carcinogenic agent, the occurrence of cancer among the exposed persons is only a matter of time.[10] Depending on factors of intensity, dose, and time, the ambivalent properties of carcinogenic substances or electromagnetic energy may produce either degenerating, necrotizing, aplasiogenic changes or hyperplastic, cancerоid, leukemoid, cancerous changes. The occurrence of a wide range of these reactions in a given population constitutes the environmental carcinogen pattern.

The probable industrial utilization of fission by-products and ultimately atomic energy in the near future poses grave questions—unanswerable as yet—over its potential hazards.

It is not within the province of the scientists of the atomic age to venture into the realm of the Law. It may be pertinent at a time when we enter a new era replete with potential issues for which but scant legal precedent can exist to ask ourselves whether the law concerning such issues should grow and develop by accretion of decisions on individual cases or whether society would be better served and protected by legislative formulation of equitable laws founded upon sound scientific understanding of these perplexing questions.

Conclusions

An attempt has been made to present the current opinion of competent medical investigators on the question of trauma as a carcinogenic agent. The common lay belief that simple mechanical injury—as a blow or contusion—as a carcinogenic factor is denied. The capacity of other traumatizing substances or forms of energy to function as carcinogenic agents is documented. Reasonable criteria for establishment of such a case are suggested. A question is asked as to the best and most logical path that the Law and Medicine should follow in coping with probable issues in the foreseeable future.

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There are several lesions occurring in the larynx which may simulate cancer clinically, namely, benign mucus polyps, pachydermia, papilloma, tuberculosis and syphilis.

* * *

To the experienced, a differential diagnosis of cancer of the larynx based on clinical characteristics alone is often inaccurate.

* * *

In doubtful cases of laryngeal cancer an accurate diagnosis can be made only by biopsy.

Lack of immediate facilities or experience for direct laryngoscopy is no excuse for failure to exclude the possibility of cancer by histologic examination.

* * *

In general, it appears that not more than 10 to 15 per cent of thyroid tumors can be greatly helped with radioiodine.

* * *

Cancer of the tongue, which was first a surgical problem and then a radiation problem, is now becoming a surgical problem again.

Artificial Insemination and the Law

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THE INSEMINATION of human beings by artificial means is not new, but it was not until comparatively recent years that the practice became widespread. A good deal has been written on the subject, but most of this is necessarily conjectural. The writers agree on one point, and that is that nobody knows much about the rights and liabilities of the parties involved because the question has seldom come up in the courts. There are a few widely publicized cases, but although certain questions are discussed by way of dicta, the decisions are precedent for only a few questions of law.

Definition

Artificial insemination is the introduction of semen into the female reproductive tract by mechanical means in order to effect pregnancy without sexual intercourse. Where the husband is fertile and the wife is capable of bearing a child in the normal way, but normal intercourse is for some reason impossible, semen of the husband is used for the operation. No special legal problems arise in this situation, which is known as homologous insemination, or AIH. It is heterologous insemination, or AID, the situation where the semen of a third party donor is used, that gives rise to legal complications, and indeed, has the effect of creating entirely new legal concepts.

Annulment Granted Where Child Resulted from AIH

An English court in L. v. L. (1949, 1 A11 E. R. 141; 65 T. L. R. 88) granted an annulment of marriage for failure of consummation after the wife had borne a child by artificial insemination homologous, in an attempt to remove the psychological reasons for her husband's impotence. The court said the stigma of illegitimacy was not what it once was, and it preferred to bastardize the child so conceived rather than uphold the validity of a marriage which it deemed unconsummated. The court was unwilling to consider that a marriage was consummated by anything short of sexual intercourse, even though the wife had by artificial insemination surrendered her reproductive powers to her husband. As precedent for the holding that the decree did not violate public policy, the court cited Dredge v. Dredge (1947, 1 A11 E. R. 29: 63 T. L. R. 113), a case involving a child, conceived before marriage, who had been legitimate for seventeen years until the marriage was decreed a nullity. It has been suggested that the time has come when incapacity and wilful refusal to consummate should be made ground for divorce and not nullity, because the stigma of bastardy is too great. (L. C. B. Gower, commenting on L. v. L. in Modern Law Review (Eng.) 12:384-7, 1949). That is the law in England. The divorce laws of Michigan are much more liberal and the courts should not have to rationalize to attain an equitable result in such a case.

Presumption of Legitimacy

Language in Russell v. Russell (1924 Appeal Cases 687 at p. 721) is frequently quoted in discussions of artificial insemination, but that case is authority only for the fact that in England the rule laid down by Lord Mansfield, that the declarations of a father or mother cannot be admitted to bastardize the issue born after marriage, is still good law. The case involved, not artificial insemination, but birth control, and the court said that the law is not interested in the exact process preceding the institution of pregnancy, providing the husband is the biological father of the child.

Admissibility of Evidence to Rebut the Presumption

Many courts have relaxed the rule of the Russell case and support the proposition that the presumption of legitimacy may be wholly removed by proper and sufficient evidence showing that the husband was impotent; entirely absent so as to have no intercourse or communication of any kind with the mother; entirely absent at the period during which the child must in the course of nature have been begotten; or present only under such circumstances as to afford clear and satisfactory proof that there was no sexual intercourse. (3 R. C. L. 727). There are a few cases in this country holding that evidence that a child born during wedlock is of a different race or color than the mother's husband is admissible for the purpose

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of rebutting the presumption of legitimacy. (31 A. L. R. 1119). In Bullock v. Knox (96 Ala. 195, 11 So. 339) the court declared that a child is a bastard though born or begotten and born during marriage when it is impossible that its mother's husband could have been its father; and that every species of legal evidence tending to this conclusion is admissible on the trial of the issue as to its legitimacy.*

Legitimacy as Viewed by the Court in the New York Case

On the question of legitimacy of a child conceived by AID, the Supreme Court of New York County in Strnad v. Strnad (190 Misc. 786, 78 N. Y. S. 2d 390) undertook to lay down the rule that a child conceived by AID with the consent of the husband was legitimate, stating that logically and realistically the situation is no different than that pertaining in the case of a child born out of wedlock who by law is made legitimate upon the marriage of the interested parties. The court ignored the fact that in the one case the husband is the biological father and in the case of AID he is not, and that this fact alone is the basic reason for the illegitimacy of the child. The Michigan statute M.S.A. 27.3178 (153) legitimizing the child whose parents intermarry was enacted to legitimize the child of the biological father. It does not pertain to intermarriage between a man and a woman who is the mother of an illegitimate child by another man.

The Strnad case was a custody suit involving the right of the husband to visit the child conceived by AID. He was not shown to be an unfit guardian of the child, and it was found that the best interests of the minor child called for visitation by him. The court said that the child had been potentially adopted or semi-adopted by the defendant, and in any event, with particular reference to visitation, he was entitled to the same rights as those acquired by a foster parent who has formally adopted a child, if not the same rights as those to which a natural parent under the circumstances would be entitled.

Is AID Adultery?

As to whether AID constitutes adultery, the Ontario court in Orford v. Orford (49 Ont. L. R. 15, 1921) expressed the opinion by way of dicta that heterologous artificial insemination would be adultery, and defined adultery, under the facts of that case, as the voluntary surrender of the reproductive function of a married woman to one other than her husband. However, the court found that, whatever the wife's physical incapacity for normal intercourse had been at the time of her marriage, the birth of the child resulted from an actual act of adultery. In defining adultery, the court noted that "all the definitions, whatever may be the system of law or whatever the country in which the term calls for definition, use the term 'sexual intercourse' or some synonymous expression to describe one of the necessary ingredients or characteristics of the offense." The judge traced the definition back to Mosaic law, and said that the essence of the offense of adultery consists, not in the moral turpitude of the act of sexual intercourse, but in the voluntary surrender to another person of the reproductive functions or faculties of the guilty person. The court stated the law to be that, no matter how indecent the act, nothing short of sexual intercourse constitutes adultery. Therefore, he reasoned that it is not the moral turpitude that matters but the invasion of the reproductive function; and he added, "If it were necessary to do so I would hold that that (the introduction into her body by unusual means of the seed of a man other than her husband) in itself was sexual intercourse. ***And if such a thing (AID) has never before been declared to be adultery, then on grounds of public policy, the court should now declare it so." Under the reasoning in the Orford case, the marriage of the plaintiff and defendant in L. v. L. would have been declared valid, had the case come before the Ontario court.

The question as to whether or not AID constitutes adultery has not been passed upon by a court of last resort in the United States, but in Hoch v. Hoch (*Chicago Sun,* Feb. 10, 1945), a case before the Circuit Court for Cook County, the husband sued for divorce on the ground of adultery, and the court held that no definition of adultery includes artificial insemination.

Consent

It is the usual thing for the doctor who practices artificial insemination to have the husband and wife sign a written consent to the operation.

*See also Sullivan v. Hugly, 32 Ga. 316; Nolting v. Holt, 113 Kan. 495, 215 Pac. 281; Editorial, J.A.M.A. 112:1832, May 6, 1939.

These consents are witnessed, and there are various suggested forms.†

The suggestions include, among other things, provisions giving the doctor authority to select the donor, and for the destruction of all records pertaining to the donor, and the safeguarding of, or designation of a suitable depository for, the consent itself. It has been suggested also that the parties undertake to save harmless the physician from any claim or action arising out of the operation, and to see to it that the rights of third parties will not be adversely affected by the birth of a child as the result of the insemination.

Effect of Consent on Legitimacy

How far such a consent will protect a child conceived by AID against being declared illegitimate, I do not know. The court said in the Strnad case that the child was legitimate, but the court in that case seemed to be casting around for any possible reason to lift the stigma of illegitimacy from an innocent child. There is no statute in Michigan defining artificial insemination or establishing the status of a child conceived by AID, and there is no Michigan case in point.

If the child is illegitimate, the consent does not ordinarily comply with the legitimizing statute M.S.A. 27.3178 (153), which states that such child shall be considered legitimate for all intents and purposes, provided the parents intermarry or acknowledge such child as the child of the man in an acknowledgment, executed by the father and the mother, if she be competent, and acknowledged in the same manner as required for the execution and acknowledgment of deeds of real estate, and recorded in the office of the judge of probate of the county where either the father or the mother is a resident. In Ghosson v. Estate of Stewart, (319 Mich. 204, 29 N. W. 2d 282), the court held that the statute must be strictly complied with to entitle the child to share in the father's estate.

In any event, the "father" contemplated by the statute is the biological father of the child. The husband in the AID case is obviously not the biological father of the child, and his consent to AID, even one complying with the recording statutes, could not operate as such acknowledgment. Actually, his consent is an acknowledgment that he is not the biological father of the child. Conceivably, only the donor would qualify to act under the statute, and that is a ridiculous proposition, because the whole purpose of AID is to use a donor merely as a means to provide the husband of the woman inseminated with an heir.

We should remember that it is general practice that the doctor who performs the artificial insemination does not deliver the child. The purpose of this is to keep secret the child's origin and to protect the doctor in the case of AID from the onus of having either to betray the patient's confidence or falsify the birth certificate. Under this practice, the foster father is named in the birth certificate as the father of the child, and an acknowledgment by him would not be entitled to record, under the ruling that, where a child is born during wedlock and the birth was certified as legitimate, it would be improper to receive an acknowledgment of paternity under Sec. 27.3178 (153) M.S.A., since the section applies only in cases of illegitimate births. (Op. Atty. Gen. Aug. 29, 1949, No. 1038). Until a child born during wedlock is adjudicated illegitimate, acknowledgment as provided by this section cannot be accepted by the probate court for record. (Op. Atty. Gen. Sept. 16, 1946, No. 0-5050).

It has been suggested that the mother and foster father undertake in writing to see to it that rights of third parties will not be affected adversely by the birth of a child conceived through artificial insemination. As a practical matter, they can have no way of knowing what persons might in future years be affected adversely by the birth of such child, and it does not seem too farfetched to anticipate the death of both parties years before the death of the child, and the impossibility of fulfilling the undertaking by any means other than a public record of the fact that the child was produced by artificial insemination. Then, too, it is possible that the husband was not sterile after all. Would such an undertaking cut the child off from any inheritance whatever in favor of an afterborn child, if a natural afterborn child were held to be one of the class of third parties contemplated by the provision?

Rights of Illegitimate Child

The right of inheritance of an illegitimate child is well defined in Michigan. The illegitimate child

†See Editorial, Medicolegal Aspects of Artificial Insemination, 147 J.A.M.A. 250, Sept. 15, 1951, in which is set forth a form from "Doctor and Patient and the Law," L. J. Regan, St. Louis, C. V. Mosby Company, 1949; also see J.A.M.A. 116:2747, June 21, 1941. Frances I. Seymour, M.D. and Alfred Koerner, M.D.).

is the heir of his mother and shall inherit her estate, in like manner as if born in lawful wedlock, and shall be allowed to claim as representing his mother any part of the estate of any of her kindred, either lineal or collateral. (M.S.A. 27.3178 (151). This right of inheritance is transmitted to the legitimate children of the illegitimate child, and they inherit from the ancestor through the parent. (Goodell v. Yezerski, 170 Mich. 578, 136 N. W. 451).

Should the foster father tire of supporting the child of AID, there is no law in Michigan under which he could be compelled to do so. The statute (M.S.A. 25.462) provides for support of illegitimate children, but acknowledgment of the father that he is the father or other proof that he is the father is necessary to enforce support. Could the donor be compelled under the statute to support the child whose mother he had never seen? Practically, he could not, but only because under ordinary practice he could not be found.

Would the Consent Operate as an Adoption?

Despite the words "potentially adopted or semi-adopted" used by the court in the Strnad case, the consent would not serve in Michigan as an adoption, for adoption proceedings are purely statutory (M.S.A. 27.3178 (541 ff.), and the court has ruled that, in order to accomplish an adoption, there must be substantial compliance with the statute pertaining thereto. (Roberts v. Sutton, 317 Mich. 458, 27 N. W. 2d 54). That case is authority for the rule in Michigan that a contract to adopt might be found where the facts warrant it. But remember that such facts give rise to years of litigation. And in Albring v. Ward (137 Mich. 352, 100 N. W. 609) the court found no such contract to adopt, although an attempt had been made to adopt by invalid proceedings. The contract theory seems to be in conflict with the words of the court in the Strnad case when it talks about a "potentially adopted or semi-adopted" child, for there was nothing suggesting a contract to adopt in the facts of that case.

Rights of Inheritance by Adopted Child

Should the Michigan court follow the Strnad case and find an adoption, the laws of inheritance are clear. The adopted child is the heir at law of the adopting parent or parents the same as though he were in fact the child of such adopting parents. M.S.A. 27.3178 (549). But that child does not inherit from the kindred of the adopting parents. (Van Derlyn v. Mack, 137 Mich. 146, 100 N. W. 278; Moritz v. Callender, 291 Mich. 190, 289 N. W. 126; Moritz v. Horsman, 305 Mich. 627, 9 N. W. 2d 868).

As to the position of the donor in AID, the child would not inherit from him in Michigan unless he acknowledged the child under the statute. M.S.A. 27.3178 (153).

To Protect the Child's Inheritance

The couple contemplating AID should be advised that, while they may wish to create a status for the child exactly as though that child were their own, that is an impractical dream. The child is not their own child, nor can it become as their own even after legislation is passed defining its status. That legislation will be subject to interpretation by the courts, and the courts are not likely to extend the rights of the child conceived by AID beyond the rulings governing inheritance by adopted children. A New York court has aptly stated the principle underlying these rules in In Matter of Hall's Estate (234 App. Div. 151, affirmed 259 N. Y. 637, 182 N. E. 214) thus: "The statute * * * does not * * * permit one to adopt heirs for third persons."

The child's right to inherit might be protected by a will, but it must be remembered that such a will must be carefully drawn with the child properly described. Does "my son, George," in the will of the foster father properly describe the son conceived by AID? I do not believe it does at the present time. When the proper legislation is passed, then that description will serve, but in that event George will inherit as the heir of the foster father. And in order that George may inherit from his paternal grandparents under any laws that may be anticipated, the grandparents are still going to have to make a will.

The Question of Adultery

If AID constitutes adultery, as was stated without reservation in the Orford case, then it would seem impossible that the child produced thereby could be declared legitimate, yet under French law that is exactly what takes place. (Editorial, J.A.M.A. 135:729, Nov. 15, 1947). The editorial quotes R. Savatier, Professor of Law at the Poitiers Faculty. "The woman who consents (to AID) introduces an intruder into the family. This constitutes adultery, which is not absolved by

the courts, even by the consent of the husband. Being similar to adultery it would be grounds for divorce or judicial separation. On the other hand, repudiation of paternity is impossible on the ground of impotency or adultery because the husband is the legitimate father of the child." It is entirely possible that this same line of reasoning might follow legislation legitimizing the child conceived by AID.

If AID is declared to be adultery, unless condoned, the husband would have ground for divorce or legal separation. And if the wife is guilty of adultery, then the donor is guilty as well. (M.S.A. 28.218). The section defines adultery as "the sexual intercourse of two persons, either of whom is married to a third person." But let me note again that the court in Orford v. Orford, when it defined adultery and included AID within its scope, noted particularly that those words were common to all statutes defining the offense.

The Question of Rape

Probably it does not happen too often that a woman is inseminated without her consent. However, it is not difficult to bring such an act within the definition of rape. And if the doctor is guilty of rape, then the husband who aided and abetted the crime would himself be guilty of rape. In People v. Chapman, (62 Mich. 280, 28 N. W. 896) a husband who aided and abetted a rape on his wife for the purpose of securing evidence for a divorce was convicted of rape. And it has been held in People v. Meli (193 N. Y. S. 365), under a statute similar to M.S.A. 28.979, which abolishes the distinction between the accessory and principal, that while a husband cannot personally be guilty of a rape on his wife, if he counsels or aids or abets or assists or forces another to have sexual intercourse with her, or forces her to submit to sexual intercourse with another, he is guilty of rape.

Necessity for Regulation

A survey conducted by the National Research Foundation for Eugenic Alleviation of Sterility (reported in J.A.M.A. 116:2747, June 21, 1941 by Frances I. Seymour, M.D. and Alfred Koerner, M.D.) shows that in 1941 nearly 10,000 women had achieved at least one pregnancy by artificial insemination. In two-thirds of the cases the semen of the woman's husband was used, and donors furnished the rest. Whether we like the procedure or not, something should be done to protect the children, who now may be nullius fillius, so far as the law is concerned. And something should be done to regulate the practice of artificial insemination. When we consider that the successful pregnancies covered by the survey required from one to seventy-two inseminations, and that a comparatively small number of doctors are engaged in the practice, regulation is necessary for the protection of all parties concerned, the doctor, the parents and the child, and the donor and his wife, or the operation should be declared to be a crime.

A report of an unofficial Commission of the Archbishop of Canterbury in 1945 recommended that AID should be made a criminal offense. But it was argued in debate in the House of Lords in 1949 that such legislation would only drive it underground and out of the control of reputable medical practitioners.

Minimum Statutory Provisions

There are certain minimum requirements that any proposed statute should cover. It should provide a form of consent to be signed by the husband and wife, and a penalty for performing the insemination without such consent. The prerequisites for execution of an acknowledgment of paternity under M.S.A. 27.3178 (153) might well apply to such consents, viz., that they be executed and acknowledged in the same manner as required for deeds of real estate. The state department of health, where the birth records of illegitimate children are required to be filed, would be the logical custodian of the records of artificial insemination. (M.S.A. 14.232). However, the provision of M.S.A. 14.236 that copies of illegitimate births shall not be furnished to anyone but the mother of the child or the child except upon order of a court of competent jurisdiction might better apply to the consents in artificial insemination, rather than M.S.A. 14.232, which allows the furnishing of such records to a much larger class of persons, and which prevails over Sec. 14.236 in this respect. (Op. Atty. Gen. Sept. 30, 1947, No. 590). A well-drafted statute, which was proposed in New York but failed of enactment, contained a provision that would preclude a parent from showing in evidence that the child was conceived by artificial insemination. The selection of donors should be regulated with respect to blood typing and examination for certain diseases. Of course, the statute would not be complete with-

out defining the status of the child with respect to the mother and foster father, their duty to support the child, and his right to inherit from them. It should also define the status of the child as regards inheritance from the kindred of the foster father.

Where the Doctor Stands

Not much has been said here about the position of the doctor who performs the insemination. It goes without saying that the husband and wife should always be required to consent in writing to AIH or AID, although if AID should ever be declared to be against public policy, then no form of consent whatever would be of any value. Frances I. Seymour, M.D. and Alfred Koerner, M.D. suggest that finger prints of both husband and wife be placed on the margin of the consent as a precaution against fraud by a wife who is unknown to the doctor and who, because of her husband's objection to the insemination, might bring in some sterile friend for the examination as to sterility and to sign the consent. (J.A.M.A. 107: 1531, Nov. 7, 1936).

The care and skill required are the care and skill employed by an ordinarily careful and skillful practitioner of artificial insemination in the exercise of his best judgment under like circumstances in the same or similar communities. A report of the Bureau of Legal Medicine and Legislation of the American Medical Association (J.A.M.A. 147:250, Sept. 15, 1951) calls attention to the fact that the physician assumes certain risks of unsatisfactory results due to the unfitness of the donor in AID, but does not attempt to say how far a woman and her husband may relieve him of that responsibility. And no more can anyone else. Under the general rule as to malpractice, the physician must use his best judgment. Since the amount of care varies with the circumstances of each case, it would seem that the nature of the physician's undertaking would require care in a degree never before assumed by the medical profession. In AID the physician acts as the agent to bring into being a life outside the marriage relation. Even ignoring the moral aspects of the case, that is new and outside the scope of anything the physician has ever undertaken before.

Moral Considerations

The moral side of the question is not within the purview of this paper. But I might note briefly that I have not found any statement by the Jewish or Protestant churches, other than the Church of England, touching on this question. The report of the unofficial Commission of the Archbishop of Canterbury in 1945 expressed no objection to artificial insemination homologous, but declared artificial insemination heterologous to be adultery. (Modern Law Rev. (Eng.) 12: 384-7). The Rev. Dr. F. J. Connell of Catholic University of America has stated that the procedure in heterologous insemination violates the social purpose of matrimony "because the child so conceived and born springs from parents not married to each other." (*New York Times,* March 12, 1947, p. 20, col. 2). But it would seem that even homologous artificial insemination might violate another precept of Catholic teaching, depending upon the method used to collect the spermatozoa. The Church would condone AIH only when the sperm is collected by aspirating the material through testicular punctures. This method has been reported (19 Bull. N. Y. Academy of Medicine, 573-82, 1943) as being largely unsuccessful, though Doctors Seymour and Koerner, as a matter of routine practice, use material collected by testicular puncture in examining the husband for sterility before performing an artificial insemination. (J.A.M.A. 107:1531, Nov. 7, 1936).

Therapeutic Value

The advocates of artificial insemination argue that the therapeutic value of bringing a child into the childless home more than compensates for any risks involved. A survey of the sociologic and psychologic effects of artificial insemination with donor semen (reported by H. L. Lamson, W. J. Pinard and S. R. Meaker in J.A.M.A. 145:1062, April 7, 1951) showed that unhappiness in marriage probably results more from not wanting children than from not having them. They also pointed out that some men were psychologically unable to welcome the child of an unknown donor into the home, even though they might wish to do so. The authors emphasized the need for the greatest care in determining whether or not to perform the operation because of the psychological problem, and warned against the danger in assembly line manipulation of life.

Conclusion

In conclusion, it may be said that the physician who performs the insemination, the husband and

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The Struggle of the Patient Against the Doctor

By Gregory Zilboorg, M.D.
New York, New York

WHENEVER a group of men foregather officially to pay tribute to a member of their profession, it is expected that they will tell him to his face and to themselves only those things which are good and pleasant. They would certainly avoid telling him what they do not like about him, or what they consider his errors or defects. On such occasions, men are in a happy, laudatory mood, and that mood would certainly be jarred if they permitted themselves to think of unpleasant things and suddenly tell what is wrong with the man to whom they want to pay public tribute by a public display of affection and loyalty.

Please do not be anxious and do not anticipate that I came here to give voice to any criticism. First of all, I don't think I was "imported" from another state for the purpose of playing the role of the devil's advocate, or of the devil himself, in order to tell Dr. Leo Bartemeier to his face a few unpleasant things. There are so many unpleasant things in this world, and so many defects of character and errors of judgment, that there is enough to go around and for every one of us to get his share willingly or unwillingly, wittingly or unwittingly. There is enough for every one of us here. As a matter of fact, I think it is dull and trite for any group of people, especially doctors, to repeat the gentle acrimonies and the bitter kindnesses which we tell or whisper about each other in private, or in semi-private. And I did not come all the way from New York to be deliberately dull.

On the other hand, I just won't fall in with a singular custom and engage in an outpour of superlatives about Leo Bartemeier. For, as I see it, we are paying tribute tonight to a man who achieved some rather unique professional recognitions and distinctions, and we envy him, and we wish—some of us at least—it were our lucky lot to have arrived at such level of distinction at such an age. What is more, in so far as we consider him one of us, that is to say our very own, we certainly wish to be a part of this brilliant professional career, and we get together and as one we rejoice in what Leo Bartemeier has achieved as a leader, as a friend, as a doctor, as a professional man, as a human being. All of us here in this room tonight are, so to speak, one big Leo Bartemeier, as if we could or should be much bigger, and we rejoice in this communal identification with him whom we are dining and wining and vociferously lulling into the false belief that he achieved almost everything a man, a doctor, could achieve. And we too have achieved it all through him. We rejoice that, although this is not exactly the end of a perfect day, it is at any rate a wonderful occasion to eat ourselves, drink ourselves, and talk ourselves into the belief that everything is wonderful in this wonderful world, in the wonderful medical profession, in the wonderful medical profession of the State of Michigan, and in the wonderful life of the wonderful Dr. Leo H. Bartemeier.

As I told you, I did not come here to disabuse you of your faith in or delusions about Leo Bartemeier. I could not do this for many reasons, the major one of which being that I have my own faith in and delusions about Leo Bartemeier. And what can be a greater faith, a more human and enjoyable delusion, than the knowledge and experience of that humanness and that charm and that sense of loyalty which is associated with the name of the man whom you are honoring tonight, and of whom I have the honor and the humble pride of being an almost life-long friend? However, Leo Bartemeier would not want me, nor would I be tempted, to sell my conscience for the stately meal of which we have just partaken and therefore forego the discomfort of telling you some of the difficulties under which Leo Bartemeier works. These difficulties are also mine, I must confess, and they are also the difficulties of many of those present here.

The first difficulty is this: Leo Bartemeier is a psychiatrist. Not that psychiatry is difficult, but it is difficult to be a psychiatrist; psychiatry is difficult enough for the many who are not psychiatrists, but it is most difficult for the psychiatrist himself. Why? How? To answer these queries means to list all the difficulties involved in being a psychiatrist, and I shall proceed to describe some of the issues involved without systematically numbering or labeling them.

As a doctor the psychiatrist deals with patients, which means with people who are ill, and his job is to treat them, which means to minister to their health. Please note that I did not use the word

Address delivered before the Michigan Society of Neurology and Psychiatry, Detroit, March 12, 1952.

"cure." Most of you know how dangerous and misleading a word it is. Do we really cure our patients? Does any of us, any of them? Would it not be better to return to the older Hippocratic tradition which was still fully alive even seventy-five years ago? According to this tradition, the physician does no more than help the *vis medicatrix naturae,* the healing force of nature, to do its job. The word physician originally meant one who *took care* of patients so that nature could cure them. The direct and almost the last exponent of this point of view was Oliver Wendell Holmes, who always reminded his students and young physicians of his friend and teacher Jackson, who emphasized that *to cure* a patient means *to care* for him. In this respect there is little difference between the psychiatrist on the one hand, and the internist or surgeon or any other medical specialist on the other. But here the absence of difference ends. From here on there is confusion even, or particularly, in our day when psychiatry is so popular, so well advertised, so generally admired and so just as generally but perhaps less publicly disliked.

I mentioned Oliver Wendell Holmes. Let us see what Holmes thought of the need to be treated.

"In the first place," said Holmes, advising young practitioners, "the persons who seek the aid of the physician are very honest and sincere in their wish to get rid of their complaints, and, generally speaking, to live as long as they can. However attractively the future is painted to them, they are attached to the planet with which they are already acquainted. They are addicted to the daily use of this empirical and unchemical mixture which we call air, and would hold on to it as a tippler does to his alcoholic drinks. There is nothing men will not do, there is nothing they have not done, to recover their health and save their lives. They have submitted to be half-drowned in water, and half-choked with gases, to be buried up to their chins in earth, to be seared with hot irons like galley-slaves, to be crimped with knives, like cod-fish, to have needles thrust into their flesh, and bonfires kindled on their skin, to swallow all sorts of abominations, and to pay for all this, as if to be singed and scalded were a costly privilege, as if blisters were a blessing, and leeches were a luxury. What more can be asked to prove their honesty and sincerity?"[1]

True as these words about patients are, they sound a bit suspicious to the modern ear. Holmes seems to protest too much, as if he wished to disabuse young physicians of their suspicions that some patients at least are neither sincere nor honest about their complaints. We might recall in this connection that Holmes spoke with questionable charity, considerable haughtiness, and acidulous smugness of certain ladies (whom we would call neurotic today) who would feel sick if they were well, and who felt well only when they were sick and had their great quantities of pills within and around them. Intuitively, Holmes must have sensed something about these ladies with which we are quite familiar in modern psychopathology.

There is an essential difference between the "sincere and honest" complaint of the average so-called organic patient and the psychological patient. That essential difference has many aspects. One of them, for instance, is that the psychological patient will "honestly and sincerely" not believe that he is psychologically compromised until forced to by circumstances, whereas he will readily accept any diagnosis from appendicitis (which is after all easily demonstrable) to virus x (which one cannot demonstrate to him at all). I don't want to dwell upon this very familiar venture of psychological illness, because I wish to try to bring to light before you a less generally familiar feature of psychological pathology with which I believe every physician should be familiar, and which even some efficient psychiatrists have on occasion considerable difficulty in discerning.

A clinical illustration.—A gentleman of about forty years of age, a pleasant and cultivated and successful person. He is all that falls under the heading of "a well fed, white, married American man" who looks well, eats well, and has a neurosis —never mind which—and who has been in psychoanalytic treatment for some time. The treatment was progressing slowly, but well. At the exact moment which I wish to relate to you, he was rather cheerful and not too much concerned even though he developed rather suddenly a pain in his right shoulder and arm. He did not think of consulting his family doctor about it, nor did he ask me what to do about it. Instead, he merely reported with considerable definiteness that the pain

[1]Oliver Wendell Holmes, "The Young Practitioner." (A Valedictory Address delivered to the Graduating Class of the Bellevue Hospital College, March 2, 1871.) In: *Medical Essays* 1842-1882, p. 378. Boston: Houghton, Mifflin and Company, 1889.

was a result of his having had a very mild case of poliomyelitis some five years previously which had left no sequelae. At the time of the alleged attack of poliomyelitis he did have pain in his right shoulder. Now, it was "that pain." No, of course, he did not think he had polio again; it was merely a result of a weakening of his arm muscles. No, he had not sprained or strained his arm recently. His wife had advised him to use her masseuse to give the weakened muscles some exercise, and he now had massage every day and also used heat and epsom salt baths. The latter remedy had been prescribed by the masseuse. As he was telling me all this, the patient was "working" his arm and shoulder rather vigorously as if to demonstrate where and how it hurt, and while he was doing this his facial expression betrayed no physical discomfort.

There was little doubt in my mind as to the paradoxical nature of this patient's muscular symptoms. It mattered little whether it was a "myositis of unknown origin" or an undetermined complaint of undetermined physical origin. It certainly was not "nothing." Nor was it one of those hyphenated nothings which some are prone glibly to call psychosomatic while remaining unclear as to the somatic pathology of the psyche or the psychic pathology of the soma. Suffice it to say that when a patient says he has a pain it *is* a pain, whether it is "purely" psychic, or "purely" somatic, or a mongrel of the two. There is no "imaginary" pain except in the imagination of the incredulous physician or the unenlightened skeptic. A pain is a pain —and when a patient has it, he does not like it.

The difficulty begins with the very first attempt to relieve the patient of the pain which he asks us to remove. The most flagrant example of such a difficulty is the well-known compensation case who "refuses" to get well no matter what you do. As a matter of fact, the more you do for such a case the more the person involved is apt to become desperate—the doctor because of his failure despite everything he does, the patient because of not getting well or of getting more pain or new symptoms. The platitudinous explanation which is usually given in such cases really does not hold much water. For to say that such a patient prefers to draw the pittance offered him by compensation insurance and live in undignified misery is to say something that does not sound quite right, no matter how often such an explanation is offered or even generally accepted. No one prefers to be miserable in exchange for twenty dollars a week, with a pain or insomnia constantly poisoning his life, and his wife and several children in need and desperation. There must be, there is something about such people which makes them behave the way they do. No one really, consciously, rationally chooses invalidic dependence combined with desperation. The ready-made "logical" and pseudo-rational explanations which used to be given for such cases have lost their medico-psychological meaning.

During the last twenty-five years or so more and more members of the medical profession have come to understand the true psychology of why people with symptoms of purely psychological or mixed origin seem not to respond to usual treatment; more than that, at times they seem to get worse the more we do for them by way of medicamentous or persuasive therapy—that is to say, they show what became known over thirty years ago among psychoanalysts as "the negative therapeutic reaction." To put it in our everyday idiom: some of our patients develop new symptoms, or the old ones become exacerbated, seemingly as a direct result of our therapeutic efforts. At times the physical aspects of the clinical picture may even disappear; but the patient, instead of being relieved and happy, merely says that he is glad his headache is gone, or his twitching has disappeared. However, he does not appear to be too happy, he even seems distressed or restless, or listless and depressed: as if a depression or an anxiety had taken the place of his headache or his muscle twitching. What is it that happens to these patients? Let us leave the strict meaning of the term "negative therapeutic reaction" alone and return to our patient with the shoulder pain. For after all, patients are our very best source of information as long as we keep our wits and avoid ready-made, facile, logical constructions.

You will recall that the gentleman with the shoulder pain was under treatment. He had a neurosis, but not an incapacitating one; he continued to function socially quite well, and he also did quite well in business. His trouble was in his marital life, and in his tendency to drink more than was good for him.

At the time he was giving me so many indefinite details about his shoulder pains, I told him that of course I did not know what his shoulder condition

was any more than did his wife's masseuse (Could a psychiatrist be medically more modest?). But I was somewhat uncertain and went over with him the history of his polio. It turned out to be a rather vague history. The temperature never rose above 101°F. The illness lasted only a few days. Three doctors were consulted in succession; one said it was a "muscle sprain;" another said it "might be bursitis"; the third thought it might be a "mild case of polio." The patient settled for polio and recovered uneventfully. At the time the patient was going through a period of particularly acute friction in his home life; he later divorced his first wife.

I inquired as to the exact time the recent shoulder trouble had begun, and when I had received a fairly accurate answer I pointed out to the patient that the attack of pain in the shoulder coincided, more than by mere coincidence it seemed, with a severe quarrel with his present wife during which she had thrown a glass at him and he had slapped her with considerable force. Yes, the patient is a right hander; he used the right hand to slap with, and consequently the right shoulder to swing with.

I shall omit the many details that led almost inescapably to the conclusion that the pain in the shoulder was intimately connected with the blow he had dealt his wife. He was ashamed of his propensity to use physical force (only against his wife), and he was quite irritable when even a faint allusion was first made that the pain in his shoulder might be of psychological origin.

Please note that the patient was irritable. It was at once distasteful to him even to imagine that the shoulder trouble was not a direct successor to his alleged polio of a few years before. As you see, even patients who are willingly undergoing psychological treatment dislike the idea of the psychological origin of certain symptoms. This patient is not an exception. It is here that we find the root of the major difficulty with and in psychiatry, and of being a psychiatrist. In psychiatry the patient always fights the doctor. Some shadowy reflection of this propensity in patients is found even in surgery. Don't we tie our patients to the operating table even after they are fully under anesthesia?—patients might try to struggle and to escape at most inappropriate moments. However, in psychiatry patients are always conscious, and they fight quite consciously but with their unconscious of which they are not aware.

What are they fighting for? What makes them struggle so hard seemingly against their own interest? It would be easy of course to explain their struggle in terms of the patient's so-called need for punishment, by the patient's self-punishing drives. Such an explanation, correct as it is, is yet insufficient. Why that need for constant self-punishment, and whence that fight against absolution, so to speak? Modern psychopathology is forever indebted to Freud for helping us to shed light on this paradoxical problem and offering an answer to the vexing question. He pointed out that almost every psychological symptom, particularly what used to be called the conversion symptom, is characterized by the following paradox: on one hand the symptom is a punishment for a forbidden (unconscious) wish, and on the other hand it is a gratification of the forbidden (unconscious) wish. My patient seems to have punished himself for having hit his wife. This was true, but in part only. Behind this apparent or suggestive self-punishment (it turned out) lurked also another unconscious trend: the patient had wanted to hit his wife, or any other woman who was close to him from his mother on, since his very childhood, because he thought his mother did not love him. He also felt guilty for wanting to hit (hitting) the woman he loved, and as soon as he developed the self-punitive symptom, the woman, in this case his wife's masseuse, took care of him, cuddled him as it were, assured him that what he needed was massage and not a scolding, an epsom salt bath instead of a punch in the nose, heat, warmth, instead of a cold shoulder. In other words, there was a real psychological, emotional gain in this symptom. All this was unconscious of course, and because of this all the more potent and untractable. As I have said, we owe to Freud this discovery—that the psycho-biological processes which produce a neurotic symptom arrange themselves in a sort of equilibrium in which the very symptom itself conceals a secret but genuine gratification.

Under these circumstances, there is a far cry between the "sincere and honest patient" visualized by Oliver Wendell Holmes and the psychological patient who, even when he comes to us, has an ax to grind, so to speak. He is of course consciously eager to get rid of the incapacitating symptoms, but unconsciously he is unwilling to give up that paradoxical equilibrium, that psycho-biological even though pathological gain which is bound to be lost if and when the symptom is gone. Therefore he

must "fight" the doctor, i.e. the psychiatrist, and he does fight him either by becoming unable to give up his symptom, or by developing new symptoms in case the old one is forcibly removed by such means as suggestion or medication.

It always comes to pass that our patients, even when they like us and admire us, fight us; they are unwilling to settle for only the minor half of the bargain, which is the mere disappearance of the discomfort. What is the disappearance of a symptom to them, if the unconscious gratification which goes with the symptom is no longer furnished? The ultimate goal of the psychiatrist is not to provide a substitute for the unconscious (infantile) gratification which must be surrendered, but to provide the patient with the capacity of giving that up too. In other words, while in organic medicine the avowed and actual goal of therapy is to relieve the patient from trouble without any sacrifice at all to the patient, save perhaps a monetary one (exceptions are of course noted and taken into consideration), in psychological medicine the patient is always called upon to make a substantial sacrifice, and not only of money, and no exceptions are to be found to this rule. The psychological patient must sacrifice that which is secretly so dear to him and psycho-biologically so much a part of him.

This is the secret of the great general opposition to psychiatry, for the public and the medical profession as a whole unconsciously identify themselves with the unconscious of the patient. Moreover, each patient, as we psychiatrists so well know, unconsciously expects that the psychiatrist will give him license for the free practice of the infantilism to which he is addicted through his symptom—I speak of the patient, not the psychiatrist.

This is our difficulty: this is Leo Bartemeier's difficulty. And the measure of the man is the moral courage and the spiritual sinew with which he meets this difficulty. It is given to few of us to meet it fully and without many mishaps. That we pay tribute tonight to one of these few is a sign of our own professional and human aspirations.

OPINION EVIDENCE FROM MEDICAL EXPERTS

(Continued from Page 401)

New Legislative Proposal May Invade Privacy

In giving decision, the Court said, at page 273, "It is unnecessary to determine at this time whether the examination proposed in this statute is an invasion of the employe's right of privacy." The requirement of House Bill No. 90, that the Court's experts shall be permitted access to the persons for the purpose of inspection and examination may conceivably meet the scrutiny of the Supreme Court, if the bill is enacted into law.

Lawyer-Doctor Co-operation May Stem Legislative Reform

Necessity for legislative reform may be manifest. Without this, however, it is still possible for the bench and bar, in co-operation with doctors, to exercise stricter enforcement of rules of evidence for the guidance of the expert, and to acquaint him more fully with the wisdom of these rules of evidence. Conferences with medical experts before the lawyer seeks to question them on the witness stand will pave the way for a more consecutive and detailed presentation of expert opinion evidence.

Many local bar associations are conducting joint meetings with doctors to improve the knowledge of lawyers about legal medicine, and doctors frequently are invited to address groups of lawyers.

It is just as important for doctors to know the legal rules which guide adversary litigation in actions for death and bodily injury.

As members of two great professions, all must recognize that the field of expert opinion evidence offers a challenge to the best inspiration and effort of doctor and lawyer, alike.

The Psychosurgery Program of the Wayne County General Hospital

By John A. Belisle, M.D., Rudolf Leiser, M.D., and H. Harvey Gass, M.D.,

Eloise, Michigan

IN AUGUST, 1950, a psychosurgical program was started at Wayne County General Hospital. The initial objectives of this program were twofold being, first, to benefit the clinical condition of suitable cases by this form of treatment in so far as possible, and second, to evaluate the usefulness of approved psychosurgical procedures. In the conduct of this program, it was at all times recognized and gravely borne in mind that mutilating procedures resulting in irreversible personality changes were employed.

Tending to counterbalance this very serious consideration was the commonly known fact that the psychotic patient who had failed to benefit by treatment or to improve after one year's hospitalization was faced with a nearly hopeless prognosis. His chances of ever returning thereafter to the community dwindled nearly to the vanishing point. What is worse, many of these patients faced years of mental suffering as a result of their psychosis in the form of extreme agitation, depression, and anxiety. Many remained chronically disturbed, self-mutilative, and assaultive to the point where they had to be constantly restrained, or secluded, or drugged to prevent their injuring themselves or those about them.

Because of the grave and damaging nature of the procedures involved, we felt it imperative to avoid its misuse. We conceived as misuse the performance of psychosurgery on any patient where there remained any reasonable chance of remission by any other means at our disposal or by spontaneous remission. We also considered as misuse the performance of psychosurgery on any patient whose psychiatric condition was such that no material benefit could be expected. On the other hand, it was our opinion that radical measures should be considered in those mental malignancies wherein the patient faced a lifetime of hospitalization, during which his own internal suffering was profound, or in which his behavior made him a constant and chronic danger to himself and others.

In order to prevent as far as humanly possible any misuse of psychosurgery, certain very rigid criteria for selection of cases were adopted and strictly adhered to. It was decided that, in order to be considered for psychosurgery, a patient must have been chronically ill for at least three years and institutionalized at least one year. No patient suffering from a disease prone to spontaneous remission was to be considered. The patient must have been refractory to a full course of electroshock treatment and/or insulin treatment. If a patient met these qualifications for operation, and if his psychiatrist thought surgery might be of benefit, the patient's case was presented before a board consisting of four psychiatrists and a neurosurgeon. If a majority of this board believed the patient suitable, he was moved to the treatment ward for a month's close observation. At the end of this time, the case was again reviewed by the board. Any demonstration of improvement under the maximum care of the active treatment ward tended to discourage the use of surgery. Final decision for surgery could be made only by a four-fifths affirmative vote of the board.

In our opinion, the maintenance of these rigid criteria for selection, coupled with careful consideration by a board of psychiatrists prior to operation, prevented as effectively as was possible the inclusion of any patients with any foreseeable hope of recovery or material improvement, by any other means. The other aspect of selection, namely, the task of eliminating those patients who would probably not be benefited by the operation, and the obtaining and selecting of those patients wherein the most benefit could be anticipated was more difficult. It was our belief that before psychosurgery should be decided upon, the examining board should, in so far as possible, determine that at least one of the three following objectives might reasonably be expected to be accomplished by the operation, namely, (1) improvement of the patient's illness and/or symptoms, (2) the return of the patient to home or gainful employment or, (3) the amelioration or elimination of chronically disturbed behavior which was of such a nature as to constitute a serious threat to the well-being of the patient or those about him.

From the Department of Psychiatry (Rudolf Leiser, M.D., Director) and the Department of Surgery (Merle M. Musselman, M.D., Director), Wayne County General Hospital, Eloise, Michigan.

According to the literature, prefrontal lobotomy is a form of symptomatic treatment that has been found particularly valuable in the removal or relief of such symptoms as persistent anxiety, groundless fears of the future, suicidal tendencies, self-mutilation, destructiveness, and persistent depression. Freeman and Watts have declared that success with psychosurgery can be anticipated in proportion to the amount of emotional tension present. Accordingly, we endeavored to select patients for operation who displayed a maximum degree of one or more of the preceding symptoms. We hoped, particularly to lay stress on the amount of emotional tension present. Conversely, we hoped to avoid, as far as possible, selecting cases who were deteriorated to the point of vegetative existence. In practice, the selection of patients manifesting a great deal of anxiety and emotional tension was much more difficult than we had anticipated. The existence of overtly disturbed behavior in the form of self-destructiveness, assaultiveness, or any of its other manifestations was much easier for a psychiatrist responsible for the care of several hundred chronically psychotic individuals to detect. As a result, the majority of cases brought forward for consideration by the examining board were intensely disturbed individuals, who, for the most part, were nearly totally inaccessible. The task of determining the part played by anxiety and emotional tension in the disturbed behavior of such patients was found to be extremely difficult. We believe that many cases marked by extreme inner suffering, anxiety, and depression have been missed and that too many disturbed but deteriorated patients were included. Undeniably, much is left to be desired in this method of selection but that is a question beyond the scope of this report.

By the end of January, 1952, thirty-two patients had been operated on. All operations were performed by one of us (H.H.G.). All of the patients operated upon were diagnosed as Schizophrenia. The average length of hospitalization prior to operation was six years and twenty-seven days. We classified our results into three groups (1) slightly improved, (2) moderately improved, and (3) markedly improved. Three patients died as a direct or indirect result of the operation. All these deaths occurred early in the program and in the light of our present experience are now thought to have been preventable or avoidable. Two of them were due to errors in selection and management. The first mortality occurred in a middle-aged, extremely disturbed, chronic schizophrenic who had been in the hospital for nine years and nine months prior to operation. She was totally unmanageable and a very severe feeding problem. In the course of her illness, she had become extremely emaciated and debilitated. She weighed seventy pounds at the time of surgery. Operation was looked upon as a life-saving measure. In restrospect, preoperative preparations could have been considerably improved, a modified surgical procedure done, or the patient not selected at all. A second patient survived the operation but, through a breach in postoperative management, was allowed to pick at her operative wound. She developed a postoperative wound infection which led to osteomyelitis of the skull and she died seven and one-half months later of meningitis and brain abscess. The third case was a simple operative death, the patient expiring of massive cerebral hemorrhage postoperatively. In this case, a modification of technique had been attempted, using small trephine holes which, it was found, did not allow adequate visualization.

Of the twenty-nine remaining patients, none are worse postoperatively in any way that can be determined by ordinary clinical observation. None are unchanged. Six patients fall into the first classification of slightly improved. All of these patients are chronic, severe schizophrenics who presented very serious problems in management. Postoperatively, none of them shows any change in mental content and all that can be said is that, in general, they are somewhat less disturbed, destructive, and assaultive than they were prior to operation. Outbursts are less frequent and less intense but they still occur and these patients fall short of even good ward adjustment. Fourteen patients have been classified as moderately improved. These patients uniformly show a very definite improvement or complete relief of such symptoms or behavior as extreme agitation, assaultiveness, and self-mutilativeness which primarily motivated the performance of psychosurgery. In that limited sense, the operation on these cases would be considered a complete success. The basic psychotic process in these cases has not been touched, however. Hallucinations and delusions remain unaltered, although much less in evidence. None of these patients could get along outside of an institution unless they could receive constant supervision. In this group, some of the effects of the surgery itself are manifest. Nearly all of these patients have voracious appetites and

some become very obese unless placed on rigid diets. A few of them are rather silly and prone to inappropriate giggling or laughter. Euphoria has not been noted. More characteristic is a peculiar blandness or shallowness of affect—not a typical schizophrenic flatness of affect but more the picture seen in arrested cases of paresis. Yet these patients do not show the mental deterioration seen in paresis. As a group these patients show a very curious "sameness"—a failure to stand out as individual personalities. They show a pronounced lack of initiative in everything and seem unconcerned about the future.

Case 1.—Emma D—provides a good example of this group of patients. This twenty-six-year-old white woman had been mentally ill for some time before admission. After loudly warning the customers in her husband's restaurant not to eat there because he was full of syphilis, she was spirited to the hospital on July 8, 1946. She was very delusional and was experiencing auditory hallucinations. A diagnosis of Schizophrenia, Paranoid and Catatonic types, was made. Electric shock therapy was given but resulted in only slight temporary improvement. She became a chronically disturbed, noisy, destructive patient who attacked everyone near her. She tore her clothing to shreds with her teeth and was nearly always naked.

Following operation, Emma's behavior showed a profound change. She now requires neither sedation nor restraint. She is up and about an open dormitory and she keeps her clothes on. She now takes some pride in her appearance and uses make-up fairly well. She is generally pleasant in a passive way. She eats a good deal and has become moderately obese. She still hallucinates very actively and sometimes shakes her fists at the voices and once in a while will shout angrily at them but she never attempts to hurt anyone. Her affect is bland and shallow. She takes little interest in her surroundings and contentedly sits talking softly to herself.

Lastly, we have classified as markedly improved nine cases out of the thirty-two reported. This group is not as homogenous as the preceding one. Five of these patients are still in the hospital but awaiting disposition. Two of them are still psychotic upon close interviewing, but they are overtly well enough behaved for plans to place them in family care as soon as proper arrangements can be made. Three of the patients are still in the hospital but are not overtly psychotic and should be parolable soon under proper supervision. Four of the patients are at home at the present time. No attempt will be made to generalize about this small group of patients. Instead, we will review very briefly a sampling of these cases.

Case 3.—Myrtle M was admitted to the hospital in 1947. Present illness appeared to develop following the birth of a stillborn child in 1946. After this, the patient was observed to be rambling and incoherent in her speech. She began to hear voices which called her dirty names. Following admission, the patient was so unco-operative that no formal mental examination could be performed. A diagnosis of Schizophrenia, Catatonic type, was made. Electroshock treatments were given with very minimal improvement. The patient was usually in restraint and was very self-abusive. She was loud, obscene, and destructive, constantly tearing off her clothing. Operation was performed four years and three months after hospitalization. One week later, she was noted by the nurses to be "co-operative and easy to handle." Soon she was noted to be "very neat in her dress, co-operative, and follows orders. She is eating well and her table manners are good. She is happy most of the time and laughing to herself. So far she has done very little work on the ward." For some time, however, she was given over to exposing herself, masturbating rather openly, and to making rather indiscriminate sexual advances to people of either sex. These things cleared up rather rapidly, however. In recent months, the patient has remained neat and tidy, generally pleasant and co-operative, and sociable with others. Her general mood is rather lackadaisical and cheerful although she remains rather labile. She expresses a definite desire to leave the hospital but displays little initiative in bringing about this end. The psychiatric staff feels she could make a good adjustment on the outside.

Case 2.—Yvonne K: This patient is an attractive young woman who began to develop mental symptoms following a divorce in 1946. She became seclusive, suffered from insomnia, and began drinking rather heavily. She became argumentative and threatening in her behavior. She finally became violent and destroyed most of the furnishings in her sister's home. Following this, she was hospitalized here. Examination revealed her to be resistive, negativistic, and periodically combative. Her speech was careless and irrelevant. A diagnosis of Schizophrenia, Mixed Catatonic and Paranoid types, was made. Shock treatments resulted in only temporary improvement. She remained very unco-operative, irritable, and assaultive. She constantly attacked and hurt other patients. Following operation, the patient showed dramatic improvement. She was soon able to be up and about the open ward, out of restraint, and no longer attacked other patients or ward personnel. She became very pleasant and co-operative, spoke very freely with other patients, and became very popular with them. She was prone to giggling rather inappropriately at times. She was occasionally irritable with other patients and would assail them verbally but not physically. Seven months after operation, the patient left the hospital on convalescent leave. She obtained a job and has been steadily employed ever since. Her work adjustment appears to be totally satisfactory. She has resided with a sister who complains that the patient is somewhat careless about the home, leaves her clothing scattered all around, and shows little responsibility in doing her share of the household duties. Her social life, however, appears to be normal and she

has two suitors at present. This patient's adjustment seems to be excellent and at least as good as it was prior to her present illness.

Case 4.—Irene D: History information on this patient is very limited. When she was nineteen years of age, she married a man of thirty-five. One child was born of this union. Following its birth, patient became briefly psychotic but cleared up within a short period of time. Her husband left her and they were subsequently divorced. When she was twenty-three years old, she remarried. Following the birth of a second child, the patient again became acutely psychotic and she was hospitalized. Mental examination on admission in 1948 found her to be nearly completely mute and very uncooperative. She refused to talk, refused to eat, and ground her teeth continuously. Diagnosis of Catatonic Schizophrenia was made. The patient was started on sinusoidal shock therapy and showed a remarkable improvement but relapsed very promptly. Repeatedly, she was given electroshock therapy with temporary improvement but in every instance lapsed back rapidly into a similar condition. Patient became and remained an almost indescribable problem in management. She remained in a mute inaccessible state in which she absolutely refused to eat and in which she resisted tube feedings very actively. Following operation, the patient showed dramatic improvement. She ceased to be a feeding problem at all and rapidly began to gain weight. She became pleasant and co-operative and expressed no psychotic ideas. Two months after operation, the patient went home on visit. She maintained a relatively good adjustment at home for a number of months. Then her husband brought back the two children to be cared for by the patient. The patient displayed rather promptly an incapacity to assume the extremely heavy responsibilities of caring for two small children. Her youngest child had become a feeding problem and in her attempt to manage this, the patient frequently became short tempered and often struck the child. She had to be returned to the hospital for the protection of the children. Subsequently, arrangements were made for the patient to reside in California with her parents. Not having the responsibility of caring for her young children, the patient made an adequate adjustment which has continued to the present date.

Case 5.—Matilda C: This patient was born in Italy in 1897 and immigrated to this country in 1938. In 1940, the patient's seventeen-year-old son was drowned at a lake. Following this, the patient became extremely depressed and withdrawn. She cried continuously and refused to eat or drink for a long period. She lost a great deal of weight and began to experience hallucinations and developed delusions of persecution. She was hospitalized here in 1942. A diagnosis of Schizophrenia, Paranoid type, was made. During her hospital stay, the patient was at all times very paranoid and at the same time tended to be quite depressed and agitated. She was a severe feeding problem and she constantly walked up and down the ward, wringing her hands and speaking unintelligibly in Italian. Two courses of sinusoidal shock therapy were given her with no more than temporary superficial improvement. After seven years and nine months hospitalization, lobotomy was performed on the patient. Immediately following surgery, the patient seemed quite flat and sat about the ward in a very inactive fashion. Communication with her has at all times been impossible because of the language barrier. It was gradually noted, however, that she seemed to be taking more interest in things about her and she began to show manifest pleasure in her daughter's visits to her. The daughter seemed very enthused about her condition and reported to us that she could see nothing wrong with the patient. Postoperative course was, however, marked by the occurrence of two grand mal convulsions while the patient was still in the hospital. These were controlled by dilantin therapy. Four and one-half months after operation, she was given a convalescent leave and has been out of the hospital ever since. Her family is very enthusiastic about her condition, the daughter being concerned only with one thing, that is, the fact that this patient who had been a very emaciated individual has gained over a hundred pounds and is experiencing some difficulty getting around. Before her psychosis, this patient had apparently been a very serious, compulsive individual who seldom did much talking. She is now described as being easy going, over talkative, and somewhat overly jovial. According to her daughter, however, she is in good contact with reality, has no trouble making change, and does not appear to show any mental deterioration.

Surgical Technique

Modern psychosurgical procedures have as their common surgical aim the interruption of nervous pathways connecting the thalamus with the rostral portion of the frontal cortex, usually referred to as the granular or prefrontal cortex. In general, there are three areas of attack by which this may be accomplished. In the first, by means of the leukotomy or lobotomy the connecting pathways between certain nuclear groups of the thalamus and the prefrontal cortex are severed. In the second, the caudal terminal of these pathways in the thalamus are destroyed. This procedure is referred to as a thalamotomy. In the third method, the rostral terminal, the prefrontal cortex, is ablated. This procedure is referred to as a topectomy. In addition to these three basic types of psychosurgical procedure, there have come into being a number of other modifications and technical variations in an effort to simplify the surgical technique of one or another of these methods: to reduce the surgical risk of these procedures; to make them more available for general use; to increase or to reduce the extent of the destructive procedure; and finally, to reduce the incidence of unfavorable postoperative side effects. The list of these modifications is already so long that it is almost impossible to keep abreast of them. Some of these which have attracted the greatest atten-

tion, however, should be briefly mentioned. They are cortical undercutting by means of which a surgical incision is made just beneath certain cortical areas disrupting the connections between the overlying cortex and the subjacent white matter. This is most commonly done in the subfrontal area in relation to the orbital cortex or in the superior frontal gyrus in relation to Brodman's areas nine and ten. Other areas for undercutting are also now being introduced. Freeman and Watts now utilize standard, radical, and minimum precision methods of lobotomy in an effort to achieve greater selectivity in their results. Various fractional methods of lobotomy and cortical ablations are being used by proponents who claim that their use accomplishes the desired result with minimal personality alteration. Such, for example, is the bimedial lobotomy in which only the medial portions of the frontal subcortical white matter are severed. The transorbital lobotomy which has been the subject of considerable prejudicial criticism and which unfortunately has been referred to as the "icepick" operation severs the connecting white matter in the frontal lobes by means of a stab wound through the conjunctival sac and orbital plate directly into the frontal lobe white matter. By controlled manipulation of the handle of the leukotome, its point makes reasonably accurate incisions in the white matter.

In setting up our program at Wayne County General Hospital, one of our purposes was to employ a variety of surgical procedures to determine which in our hands and in our institution proved most practicable. We have made only a beginning, having operated on thirty-two patients thus far. The first twenty-five patients were done by means of the so-called open method through large superiorly placed trephine buttons by direct visualization of the actual lobotomy. By this means all white matter in a coronal plane at the level of the sphenoidal ridge was sectioned under direct vision. We hoped that these patients would provide us with some baseline for comparison with future techniques. The second technique which we have utilized thus far in only seven patients is a blind technique, but it is much simpler and swifter so that the surgical procedure is greatly simplified compared to our basic procedure. In these seven patients, which we hope to extend to twenty-five, through superior burr holes placed on each side in the ordinary fashion, an instrument called a MacKenzie leukotome is inserted in the appropriate area of the brain, the incision is made, the instrument withdrawn, and the wound closed. This procedure should take approximately one-half hour. With this instrument a wire, like a tonsil snare, is ejected in a coronal plane from a probe which is inserted in the brain. We have not yet performed a sufficient number of cases with the second technique to compare the results, although there is no question that it is much simpler and probably as effective as the open operation which we used at first.

Conclusion

Of the thirty-two patients having undergone bilateral prefrontal lobotomy, six showed slight improvement in the sense of demonstrating a moderate reduction in the frequency and intensity of disturbed behavior. Fourteen patients were rated as moderately improved. This group of patients showed nearly complete relief of such symptoms as extreme tension, anxiety, assaultiveness, and self-mutilation. Mental deterioration is not apparent. Nine patients were greatly improved. These patients either are out of the hospital or are awaiting convalescent leave. None of these patients showed overtly psychotic behavior but lack of initiative and concern for the future was characteristic. None of them has shown any serious antisocial tendencies or any disturbance in sexual behavior so far as we know.

The number of patients operated on here to date is too small to be the basis for any statistical conclusions. Observation of these cases, however, has led us to the following two impressions. First, postoperative damage to the personality, while not as profound as it is sometimes described as being, is still sufficiently great that psychosurgery should never be used except as the very last recourse on patients faced with a hopeless prognosis in the opinion of a group of trained psychiatrists. Secondly, we have become convinced that prefrontal lobotomy is successful in a large percentage of cases in the relief of extreme tension, anxiety, and depression, and in the control of violently disturbed behavior. It has relieved much suffering in our patients and has made possible the return of a significant number of them to the community who otherwise would never have left the hospital.

Acknowledgment

We wish to acknowledge the invaluable assistance of Drs. James H. Lyons, Edward N. Hinko, Hermancia Mitchell, R.N., and other members of the Psychiatric, Surgical, Nursing, and Psychiatric Social Service Staffs.

Problems in Intestinal Obstruction

By Philip Thorek, M.D.
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INTESTINAL obstruction presents a diagnostic and therapeutic challenge to both the surgeon and practitioner. The mortality continues to remain high despite the many recent advances in electrolyte balance, intestinal siphonage, caloric requirements and surgical technique. Wangensteen, Haden, Orr, Coller and many others have contributed monumental stepping stones which enable us to understand the pathologic physiology of this condition.

Since intestinal obstruction is a symptom complex and not a disease, it is not enough to make a diagnosis of "just intestinal obstruction." To approach this problem we have devised a plan whereby we can make an earlier and more thorough diagnosis, thus enabling proper therapy to be instituted more rapidly. It is necessary to ask and answer the following four questions to correctly diagnose the condition:

1. Is this an intestinal obstruction?
2. Is it strangulated or non-strangulated?
3. Is the obstruction complete or incomplete?
4. Is it a large or small bowel obstruction?

In answer to question number one: "Is this an intestinal obstruction?" we expect to find the obstructive triad, namely, distention, obstipation and vomiting. The triad may be present wholly or in part, however, its individual parts call for clarification. Since we have no standard for measuring the distended abdomen, we have decided to utilize the anatomic relationship of the umbilicus to the xiphoid process. We believe that the normal abdomen is scaphoid and not flat, hence the umbilicus is normally placed below the xiphoid. When the umbilicus is on a level with the xiphoid, the abdomen is called *flat,* and when the umbilicus is above the xiphoid, the abdomen is described as being *distended.* Therefore, when the umbilicus is on a level with or above the xiphoid, some pathologic condition exists. When such an abnormally placed umbilicus is found we consider the differential diagnosis of the seven "F's," namely, fat, feces, fluid, flatus, fetus, fibroids and "ph"antom tumors. In almost every case one of the "F's" has been found to be the underlying cause.

It is important to record the position of the umbilicus when the patient enters the hospital, and to re-check this every hour thereafter. If the umbilicus is below the xiphoid when the patient is first seen, and one hour later is found on a level with the xiphoid, this signifies early distention. In this way we can avoid the development of a late preterminal distention that so many neglected intestinal obstructions present. Regarding *obstipation,* we know that the average intestinal obstruction passes neither feces nor flatus, but we also recall that this may be lacking in incomplete obstruction as for example in Richter's hernia, in which only part of the circumference of the bowel is incarcerated. In such cases the resulting irritation and hyperperistalsis may even lead to a diarrhea which can be most misleading when one makes a diagnosis of intestinal obstruction.

Vomiting will be more thoroughly discussed under question number four. Regardless of the absence or presence of the obstructive triad, it is far more important to elicit the one pathognomonic finding of intestinal obstruction, namely, that *pain and intestinal sounds appear at the same time.* This synchronization of sound with pain differentiates intestinal colic from any other type of intermittent pain. The physician should place his stethoscope upon the patient's abdomen when he states that he is getting his pain, and if it is of an intestinal nature he will hear the rushing bowel sounds at this time.

Question number two: "Is this a strangulated or non-strangulated intestinal obstruction?" can usually be answered by the presence or absence of tenderness. Patients with intestinal obstructions do complain of colicky pain, but the strangulated lesion has pain plus localized tenderness, which is best found by the patient, who will usually locate the exact point of the pathology. The classical example of this is a strangulated inguinal hernia. The patient has diffuse pain over his entire abdomen, but will permit one to palpate it; however, he resents having pressure made over a

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From the Departments of Surgery, University of Illinois, Cook County Graduate School of Medicine, Cook County Hospital, American Hospital and Alexian Brothers' Hospital.

strangulated mass because of its exquisite tenderness. Our incision is usually determined by the location of the patient's tenderness. Another differentiating point between the strangulated and the non-strangulated obstruction is the appearance of the patient. A patient who has a strangulated intestinal obstruction is acutely and violently ill and usually is in shock or impending shock, whereas the patient with an intestinal obstruction without strangulation does not present such a dramatic picture. The flat roentgenogram may aid in the differentiation of a strangulated from a non-strangulated small bowel obstruction. If a small bowel, non-strangulated, intestinal obstruction is present, the typical stepladder pattern is observed and the valvulae conniventes are readily seen. If, on the other hand, a small bowel strangulated obstruction is present, no characteristic bowel pattern is assumed since the distended loops arrange themselves in whatever portion of the abdomen the obstruction occurs. The valvulae conniventes are not easily detected or seen because of the extravasation of blood into the strangulated loop of bowel and into the abdominal cavity.

Question number three states: "Is this a complete or incomplete obstruction?" As has been mentioned, a patient with a complete intestinal obstruction passes neither flatus nor feces per rectum, but if the obstruction is incomplete some flatus and feces may be expelled especially with repeated enemas. It is important not to become misled by the results of the first enema, since a copius movement and flatus may be expelled following its administration. This, however, is material which is distal to the lesion. If repeated enemas bring flatus and feces, then we assume that the lesion is incomplete; if the returns of the repeated washings are clear, we conclude that the obstruction is a complete one. "A "scout" film of the abdomen should be taken when the patient arrives. This immediately reveals the bowel pattern and also determines whether or not flatus is present in the region of the hollow of the sacrum. If the flatus over the sacrum is absent following repeated enemas, we consider the condition a complete obstruction, but if flatus continues to come down and appear over the sacral region, the lesion is an incomplete one. A patient with a complete obstruction will appear more ill than one with an incomplete lesion, therefore, the clinical appearance and impression is of importance.

The fourth question that must be answered is: "Is this a large or small bowel obstruction?" The most important differentiating factor to this question is whether or not vomiting is present or absent. Patients with large bowel obstructions do not vomit, but those having small bowel obstructions do. We all have seen late cases of large bowel obstructions where vomiting has been present as a late and not too distressing symptom, but in the small bowel lesions vomiting appears very early. The higher the obstruction the more fulminating the vomiting. Utilizing this one fact, we can usually differentiate the small from the large bowel obstructions. To use the word "fecal" vomiting as being descriptive of intestinal obstruction is incorrect. The term "feculent" is more descriptive, since fecal vomiting refers to a gastrocolic fistula or some similar lesion. The flat roentgenogram is used to further differentiate the small from the large bowel obstruction. It is unnecessary to stand or turn the patient or to give him any contrast media. A flat roentgenogram which can be taken with a portable machine will usually give the desired information. If the obstruction is a large bowel lesion, the roentgenogram usually reveals a large distended colon which appears as a horse-shoe or inverted "U." The rectosigmoid is the most common location for these lesions. If, on the other hand, the obstruction is small bowel in nature, the typical paralleling or stepladder pattern will be present. The history also aids in differentiating the two types of obstructions. A slow, progressive, chronic, increasing constipation speaks for a large bowel lesion, but a sudden violent attack signifies small bowel pathology. Patients with intestinal obstruction who have had previous surgery are small bowel obstructions until proved otherwise. The large bowel obstruction resulting from postoperative adhesions is a rarity. A two-quart diagnostic enema is also a help. The large bowel can usually retain two quarts of fluid plus its usual contents. If the bowel cannot take the two quarts, this speaks for a large bowel lesion.

One may make a proper diagnosis instead of just "intestinal obstruction" by using these four questions. The case, therefore, may be diagnosed as a large bowel, non-strangulated, incomplete intestinal obstruction, or a strangulated, small bowel, complete intestinal obstruction, depending upon the findings.

Treatment

We have devised a simple plan for the treatment of intestinal obstruction based on the six "S's": suction, saline, sanguine, surgery, sulfa and the "stir-'em" technique.

Suction, or gastrointestinal siphonage, has done much to lower the mortality of this condition. It has its pitfalls, however, and these must be kept in mind. It has no place in large bowel obstructions nor should it be used when strangulation is present. On the other hand, it may be curative in postoperative ileus, non-strangulated adhesive obstruction, or in obstruction associated with peritonitis; these are usually small bowel lesions. Its value as a pre-operative or postoperative adjunct needs no emphasis. To keep a patient with a carcinoma of the rectosigmoid and a large bowel intestinal obstruction on continuous siphonage is to court disaster.

Saline, an excellent form of supportive therapy, can prolong the life of a patient with an intestinal obstruction. However, it cannot cure the condition. Chloride ions have been lost in the patient who has manifested a great deal of vomiting or in whom continuous gastrointestinal siphonage has been instituted. These must be replaced, and it is mainly by the use of "physiological" saline that the patient's chloride balance may be maintained. By restoring this electrolyte balance one is able to put his patient into better condition to withstand surgery, and in this way also to lower the mortality. Saline, however, is not the only supportive therapy that the patient needs; this will be discussed subsequently.

Sanguine is used to refer to blood and its derivatives. We feel that the only place for the use of whole blood is in the replacement of lost red cells. We prefer to keep the protein balance for the patient's normal supply of plasma, serum or amino acid therapy. If the obstruction is associated with blood loss, we feel that the fluid of choice is then whole blood. In many cases of strangulated obstructions, or in cases which might necessitate extensive bowel resection, whole blood is preferred. Maintaining a normal protein level permits a patient to properly seal because of his good fibrin content. Hypoproteinemia and hyperchloridemia are two conditions which must be avoided in the case of intestinal obstruction as well as in all other surgical emergencies. Too little protein and too much chloride both produce tissue edema and permit the patient to "drown" in his own body juices. It is because of hypoproteinemia and hyperchloridemia that sutures pull out of edematous tissue. Faulty suturing material is not the only cause of intestinal leakage; this is due to poor pre-operative and postoperative care. The patient's vitamin needs must be maintained, especially the water soluble vitamins B and C which he loses readily. Vitamin C is truly the surgeon's vitamin because this is the one which is essential to sound wound healing. If a patient has a strangulation he should have immediate surgery. As has been stated, the patient will tell us where to make the incision if we permit him to reveal his most tender spot. Complete, large bowel, non-strangulated lesions require immediate colostomy for the release of introcolonic pressure. We prefer the so-called "blind" cecostomy in such conditions. This is made through an exaggerated McBurney's incision which hugs the anterior superior iliac spine. If the cecum is distended, and it surely should be in an obstructed colon, then it bulges into the wound. It is held in place by two forceps, and an iodoform pack is placed between the cecum and the parietal peritoneum. Following this stitchless procedure, the patient is returned to bed and the cecum is opened some six hours later after it has had a chance to seal off. Since the bowel wall is edematous and will not retain sutures it is unwise to directly attack an obstructed colonic lesion. It is for this reason that we leave the primary pathology alone and do a preliminary cecostomy away from the site of the lesion. For the following ten days or two weeks the patient may be deflated, prepared and then re-operated. It is at this time that a true evaluation of the pathology can be made and a resection done. The cecostomy acts as a vent in the event that an intestinal anastomosis is performed. In strangulated lesions we may be confronted with the question: "Is the bowel which has been freed viable or not?" It seems impractical to stand about placing hot towels on a segment of intestine and watch its color. Viability is readily determined if one merely flicks the bowel with the finger and watches for peristaltic waves. If it is able to contract, regardless of the color of the intestine, it is viable. Intestinal obstruction is usually associated with a transudate which is present in the peritoneal cavity; if this is bloody a strangulation is present. Therefore, if a blind cecostomy is done and a sanguinous fluid noted, we must abandon the cecostomy and explore for the presence of a

strangulated lesion. The type of anastomosis performed is purely a personal one; however, we feel that a lateral anastomosis is the safest in the hands of the occasional operator. If time is a factor, one should be familiar with the technique of the so-called quick "aseptic" end-to-end anastomosis.

Sulfa drugs have taken their place among the chemotherapeutic agents used in the treatment of intestinal obstruction. There is also a place for such allied drugs as penicillin and streptomycin. Following the surgery, we place 3 to 4 grams of sulfathiazole or sulfadiazine in the peritoneal cavity and follow this with 40,000 units of penicillin every three or four hours intramuscularly. We do know that penicillin will not affect the colon group of organisms but it will attack streptococci and staphyloccocci. Sulfadiazine is administered intravenously following the first postoperative day and streptomycin is coming into its own as the main chemotherapeutic agent against the Gram-negative rods. Sulfasuxidine and sulfathaladine will keep the bacterial count low in the intestinal tract if those drugs can be taken by mouth.

By *"stir-'em" technique* we mean early ambulation, active and passive movements and breathing exercises. The beneficial effects brought about by getting patients out of bed as soon as possible have been well proven. We do not wish to infer that early ambulation should be carried to an extreme. It is our plan to have our major surgical cases out of bed on the first postoperative day. However, each case presents an individual problem. Having the patient move about, having him take a few deep breaths every hour, and encouraging arm and leg movements all play their part in lowering the incidence of phlebothrombosis, pulmonary complications and their sequelae.

In this discussion of the subject of intestinal obstruction, only the highlights have been mentioned; however, we feel that if we approach the problem with the "Four Questions," make a diagnosis based upon these, and then summarize the treatment with our "Six S's," we should have a logical approach to a given case.

25 E. Washington Street

ECONOMIC BAROMETER

The annual report of General Motors Corporation for 1952, which was released yesterday, should be of interest to every Detroiter whether or not he is an official, employe or stockholder of the concern.

GM's operations are an important economic barometer, particularly for this area where so much of its activities are concentrated.

Last year the company's sales set a new record of $7,549,154,419, although its profits were below those of 1950. This may reflect the fact that in 1952 a preponderantly large part of GM's activities were devoted to defense work, presumably at a narrower margin of profit. About one-quarter of the corporation's sales last year were of defense products.

What is of particular public interest is the fact that out of its gross income, General Motors paid more than $1.107 billion back to various units of government as taxes. At the same time, $2.135 billion went to its workers and managers as wages and salaries.

These are stupendous figures, reflecting the giant size of "the world's largest corporation" and indicating to what extent both government and people are dependent upon its successful operation.

The statement attributed to Defense Secretary C. E. Wilson, former GM president, that "what is good for General Motors is good for the country" certainly can be paraphrased without challenge into "what is good for GM is certainly good for Detroit and Michigan."—Editorial, *Detroit Free Press,* March 12, 1953.

Editorial

HELP MAKE A 3,000 ATTENDANCE RECORD IN GRAND RAPIDS
MICHIGAN STATE MEDICAL SOCIETY ANNUAL SESSION
September 23-24-25, 1953

MEDICAL JURISPRUDENCE

THE *Michigan State Bar Journal* and THE JOURNAL of the Michigan State Medical Society are this month jointly presenting six papers on subjects of kindred interest. Three of these papers were prepared by members of the State Bar of Michigan. We are presenting four papers written by Doctors of Medicine, three of which the *Bar Journal* is also using.

When casting about for papers to use in this joint venture we found so many topics which were of joint interest that we wondered why such a scheme of co-publication had been delayed so long. We also found an amazing number of Doctors of Medicine practicing in Michigan, and members of our State Medical Society who are also graduates in Law.

Industrial Medicine and Surgery for February, 1953, contains an article "Expert Testimony" by Carey P. McCord, M.D., of Ann Arbor, which all should read who have any occasion to give expert testimony.

We hope our readers will enjoy this effort at journalism a little out of our regular type.

ADOPTION AND THE DOCTOR OF MEDICINE

FOR A LONG time the Department of Social Welfare, the Probate Courts, and the Maternal Welfare Committee of the Michigan State Medical Society have considered the problems, risks and frustration in the many and varied attempts to accomplish the adoption of a child. The administrative personnel of the Department and the Medical Advisory Committee from the Michigan State Medical Society have spent many hours in study. The result was an editorial we published in July, 1952, page 879.

It was decided to publish a condensed statement of the legal and social requirements covering this subject in order to give our members as precise a digest as possible in cases where some of them have been accustomed to aid in the adoptive process. The proposed statement was presented to the Executive Committee of the Council who authorized publication, with the suggestion that a Probate Judge be also consulted.

The Editor submitted the manuscript to Edmund R. Blaske, Probate and Juvenile Judge, Calhoun County, who made sharp and constructive criticism, suggesting more detail. This has been done in the article on another page. Judge Blaske also mentioned that there are provisions for financial assistance to needy and expectant mothers under the Afflicted Children's Act and cautioned specifically about the desirability of legal counsel and assistance in the court procedures. He said "direct placement or arrangement by a physician will require a great deal of the physician's time in court attendance and may involve great disappointment and emotional upset to the adopting parents if the court is compelled to deny the particular adoption on the ground that the best interests of the child would not be served by granting the adoption."

Judge Blaske complimented the Michigan State Medical Society for the statement of the problem in the July, 1952, editorial as being very exact and forceful. W. J. Maxey, Director of the Department of Social Welfare, writes "Judge Blaske has done an outstanding job in Calhoun County."

We are happy to present this syllabus on the adoption problem in this number of THE JOURNAL because of the close tie-in with Medical Jurisprudence.

REASSURING GOOD WILL

THE MEDICAL profession of Michigan should guard well the considered and favorable public recognition which is now ours. As a profession many accomplishments are a credit to us.

In Michigan we are practicing the very best medical science known. Many of our doctors are leaders and have also been pioneers in medical research and advancement. Our medical teaching facilities are handicapped by limitation of numbers of students we can educate, but the quality is not surpassed, and the facilities for increased numbers is being rapidly expanded. In Ann Arbor a new Out-patient Clinic building is now in use. In Detroit progress on the new Medical Science build-

Honesty—Integrity—Skill—These Spell Good Public Relations

President's Message



In a recent issue of one of the popular news magazines appeared an interview with Paul R. Hawley, M.D., director of the American College of Surgeons. It prompted a great deal of discussion among medical men and even some bitter criticism. These remarks concerned principally the complaint that the general practitioner is being demoted in his capabilities in the eyes of the public. That is regrettable, because at this time we are attempting to interest more young medical men to enter general practice, and there is a definite need for them. Many are doing creditable surgery to the limit of their proven ability.

On the other hand, Doctor Hawley's statements contain a number of truths that only we can know whether or not they exist in our community. If they do, it is our bounden duty to see that they are corrected as expeditously as possible. Mention is made of medical audits of their own work done by the doctors themselves, of the rising standards of hospitals, and of grievance or mediation committees. An increasing liaison between the public and the medical profession through the county society must be obtained if we are to let the people know what we are doing to combat the evils in the practice of medicine, no matter how small the incidence of these grievances may be. No amount of public relations activity, as important as it is, can ultimately replace the honesty and integrity, combined with the skill, of the individual physician. William L. Bender, M.D., past president of the San Francisco Medical Society, has succinctly described our situation: "Provide the best possible medical care at the lowest possible cost and make sure everybody knows about it."

R. J. Hubbell

President, Michigan
State Medical Society

ing is very satisfactory. Michigan is now also attracting a considerable number of graduates from other states, in addition to those educated in our own schools. This is evidenced by the new registrants reported in recent numbers of THE JOURNAL.

Doctors of Medicine practicing in Michigan have made a record for themselves in a practical and successful solution of the problem of health care for their patients and the people of our state. We have explored a brand new field of economics and proven that health services are insurable services which can be planned for on a prepayment basis. We have been so successful that independent insurance companies who formerly refused are now glad to enter the field to sell such insurance. Our Blue Cross and Blue Shield have made prepayment health care available to every person in the state who has a small income, sufficient to pay the modest rates charged. At first the plans sold their policies by groups, but now state-wide private subscriptions are accepted at stated times every year. This project of the profession has been one of the most worthwhile accomplishments in the field of Medical economics.

Michigan holds another favorable position. A recent survey of medical incomes made by Medical Economics ranks Michigan first in the matter of median net income per Doctor of Medicine. The first five States are Michigan, $16,276; Washington, $16,200; Kentucky, $15,649; Kansas, $15,430; and Illinois, $15,100. The next group of states with net median income in the $14,000 bracket are, in order: North Carolina, Ohio, California, Virginia, Indiana, Texas, Missouri, Nebraska, and Florida. Surveys have also shown that the medical profession in this Great Lake States area is especially favored in that the items of costs of practice, rents, et cetera are slightly lower than the general average.

Michigan was a pioneer in the matter of medical public relations. Early we began devising other physician-patient-relation programs in addition to the prepayment plans. We have had grievance committees in our county medical societies for many years. Patients who believe they have a complaint can come to these committees, have a hearing and get an adjudication. The number of such complaints has not been great, and the facility with which they could be satisfied has been very gratifying. Other societies and other States have quite generally adopted similar plans, and found the rewards to be well worth the effort.

Such are some of the plus signs in our ledger. What of the other side?

DON'T ROCK THE BOAT

ITEMS HAVE appeared recently in the public press and national magazines tending to encourage a belief among people in general that all is not as it should be in the ranks of the medical profession. Anything which seems to throw doubt on the honesty and devoted zeal of the profession is not only a disservice to the whole population but is grist for the socializers.

As quoted in one of the national magazines the Director of the American College of Surgeons, Dr. Paul Hawley, called public attention to the charge that all surgeons are not honest. He mentioned fee-splitting, the bane of the American College of Surgeons, which is prohibited by law in Michigan and several other States and something the profession has been trying to stamp out for as many years as our oldest members can remember. Ghost surgery, where one man does the work and the patient thinks another did it; and unnecessary operations, such as appendectomies without pathology, were included in this criticism which was intended to be constructive but which provoked a plethora of adverse comments in regard to the profession, including admissions that the charges were true and denials that they are justified any more.

Dr. John T. T. Hundley, Past President of the Medical Society of Virginia, sponsored an article in the March number, *Ladies Home Journal* "Can We Trust ALL Our Doctors?" He discusses primarily the question of incompetence and malpractice. He charges that worthy claims for damages due to these faults are not possible of court action because no doctor will testify against his fellow, thus defending the incompetent and preventing malpractice suits, and the offender is allowed to continue his practices. The doctor says fortunately the number of such cases is rather small, but he details many, with comments, leaving the impression there is a grievous condition which is not being solved by the profession. Such stories certainly give plausibility to the ambulance chasing type of legal mind which sees profit in such law suits. This article would have been well placed if presented to the group of our profession who are culpable. Given to the general public it has stirred up comments not friendly.

Another type of medical shortcoming has received a mixed interpretation. During the past

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Independent Medical Experts to Testify in Injury Cases

In a move which may develop into a nation-wide model for the solution of the problem of conflicting medical claims by plaintiffs and defendants in personal injury cases, the State Supreme Court in New York County is putting into effect a plan by which medical societies will furnish top-notch independent experts to aid in settling such disputes.

Presiding Judge David W. Peck of the Appellate Division in Manhattan and the Bronx announced that the plan would be tried out as an experiment for one year, in the Supreme Court in New York County, starting December 1. The plan will be financed by a grant of $40,000 given equally by the Alfred P. Sloan Foundation and the Ford Motor Company Fund.

Explaining that the plan is aimed at "better and quicker justice, which amounts to juster justice," Justice Peck expressed hope that it might become "a historic milestone in judicial progress —a pattern for the court system throughout the nation."

The New York Academy of Medicine and the New York County Medical Society agreed, under the plan, to appoint a panel of sixty to seventy experts in various branches of medicine. The specialties will include orthopedics, neuro-surgery and neurology, psychiatry, traumatic surgery and other fields.

In instances where medical claims differ widely in a pre-trial consultation, the Supreme Court justice will assign an expert from the panel to examine the plaintiff. The expert's report will go to the court and to the opposing lawyers. If necessary, the expert will be subject to call at the trial.

Justice Peck expressed hope that the plan would have a "psychological and prophylactic effect" in inducing medical experts for both sides to moderate their claims, since they might be reviewed by an outstanding authority in their own field. He added that, in any event, the expert's findings will be of major value to a judge and jury hitherto confused by a system in which a plaintiff's doctor may tend to describe his patient as just about killed while the defendant produces a doctor who hardly finds scratches.

The new plan is one of a number of steps being taken to speed the handling of cases in the Supreme Court in New York County. As of last spring the oldest tort cases, principally negligence actions, reaching jury trial in Manhattan were as much as four years old. Justice Peck hopes that a "road block" of cases filed before April, 1949, when new screening rules took effect, might be cleared away by the end of the year. This would bring delays down to three years, with hope of trimming them down rapidly thereafter. Various measures have already reduced the pending cases in New York County from 13,000 a year ago to about 7,500 now.

Pointing out that half the time of a trial in a personal injury case is taken up by conflicting medical testimony, Justice Peck credited Supreme Court Justice Bernard Botein with originating the idea of independent medical experts almost a year ago at a meeting on court problems.

Justice Peck conferred last spring with Dr. Howard R. Craig, director of the New York Academy of Medicine, and said *the medical profession ought to team up with the legal profession to attack the problem. At a subsequent meeting between a dozen judges and doctors, the latter at once accepted the responsibility and challenge,* Justice Peck said.

He said the judges wanted power to assign the medical experts to take certain cases at certain times, *so they wanted the doctors paid.* He said the feeling was that neither plaintiffs nor defendants should be asked to bear the cost of the experimental period.

Believing that the plan might develop into something worthwhile as a pattern for the whole country, both the Ford and Sloan foundations offered to finance it. The $40,000 budget for the first year was based on the estimate that the independent experts would be invoked for 500 or more examinations.

There are about 5,000 personal injury cases a year in New York County Supreme Court, representing about 80 per cent of its work. During the past year about 30 per cent have been settled at pre-trial conferences.

Justice Peck explained that *the doctors will be*

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Reprinted by permission from the *Journal of the American Judicature Society,* December, 1952.

Michigan's Department of Health

Albert E. Heustis, M.D., Commissioner

POLIO PREVENTION PLANS

The department expects demands for immune serum globulin for use in the prevention of paralytic polio to increase sharply as the polio season approaches. Equitable distribution of the limited supply will undoubtedly present difficult problems.

In preparation for handling the situation, the department has asked local health officers to expedite reports of polio cases so that the state office may keep in constant and close touch with the prevalence and distribution of the disease. The department will, in turn, report to the National Office of Vital Statistics, the reports to serve as a basis for determining Michigan's share of immune serum globulin.

The Office of Defense Mobilization has assumed responsibility for co-ordinating the distribution, in the National Blood Program, of available supplies of immune serum globulin for use in the control of paralytic poliomyelitis, infectious hepatitis and measles.

Main supplies of gamma globulin are being made available by the American National Red Cross, the Department of Defense and the National Foundation for Infantile Paralysis. Commercial producers have made available their existing inventories and their next six months' production and the Foundation will purchase this supply and turn it into the common distribution system.

The panel of medical authorities set up by the National Research Council is at work on a plan for making the most effective use of the available supply of gamma globulin. Dr. Hugh Leavall of Harvard University is chairman of this panel. The plan provides for distribution of the central supply to state health officers, who will be responsible for its final use.

An allotment to each state is contemplated, beginning May 1, based on the median number of cases reported during 1947-51. This was not a high year for Michigan. Supplies over and above this basic allotment for the year will be determined on the basis of emergency and epidemic need.

GAMMA GLOBULIN ALLOTMENT FOR MEASLES SET

The department has been notified that its 1953 allotment of immune serum globulin for use in control of measles and infectious hepatitis has been set at 60,900 cc.

The allotment was calculated as three times the median number of cases of measles reported during 1947-51. The median year happened to be a low one. The department distributed 146,000 cc. of gamma globulin during 1952, so the 1953 allotment will probably be inadequate. Better reporting of cases would raise the allotment.

The Office of Defense Mobilization stated that the allotment will be reviewed when the early experience of 1953 can be assessed, and an additional supply made available if indicated.

LEADERSHIP TRAINING FOR PARENT EDUCATION

Regional institutes to prepare teachers for work with classes of expectant parents will be held in April at St. Mary's Lake and at Haven Hill. In accordance with requests of participants in the institutes held last year, the emotional aspects of expectant parenthood will be stressed this year. Outstanding authorities will lead the discussions.

The institutes are a part of the department's program of leadership training to meet the widespread demand for education for expectant parents.

MAY DAY WILL BE CHILD HEALTH DAY

For the twenty-fith year, May Day has been declared to be Child Health Day by presidential proclamation. This year, emphasis will be placed upon the emotional, social and spiritual growth of children.

"CHEERS FOR CHUBBY" SLATED FOR MICHIGAN

The eight-minute animated color cartoon, "Cheers for Chubby," produced in Hollywood for the Metropolitan Life Insurance Company in co-operation with the United States Public Health Service and the American Medical Association, will be shown in Michigan theaters in the near future. The Michigan State Medical Society and the Michigan Heart Association are scheduled to join with the Michigan Department of Health in sponsoring the statewide showing of the film.

How and why overweight people should reduce is the subject of the film. It has been shown in all but seven of the states, and Michigan is one of the seven.

Important messages are presented in the advertisements in our journal each month. New products are announced from time to time and information is presented regarding the use of products featured. Other types of ads emphasize services rendered and commodities offered that may be used in your practice, in your office and in your home. Doctor, you can rely on the statements and facts presented. We aim to include only ethical advertisements in our journal. Please tell the advertisers that you saw their ads in THE JOURNAL of the Michigan State Medical Society.

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In Memoriam

HERMAN F. ALBRECHT, M.D., of Detroit, died February 4, 1953, at the age of fifty-nine.

Dr. Albrecht, a gynecologist, was graduated from the Wayne University College of Medicine in 1916. He is survived by his wife, Stella, and two children.

WILLIAM FIEDLING, M.D., of Norway, died February 6, 1953, at the age of fifty-two.

For the past twenty-four years Dr. Fiedling served the communities of Norway and Vulcan. He was graduated from the Northwestern University Medical School in 1928. He interned at West Suburban Hospital in Oak Park, Illinois.

He had served on the Norway township school board —a position he assumed shortly after his arrival in the community and which he held until his death. He also served on the Norway board of education. Dr. Fiedling was serving as President of the Dickinson-Iron County Medical Society. He was also a member of the Public Relations Committee of the Michigan State Medical Society and on the Board of Pinecrest Sanatorium at Powers.

He is survived by his wife, a daughter, Sally, two sons, David and Michael. He also leaves two sisters and two brothers.

NEWTON H. GREENMAN, M.D., of Decatur, died January 18, 1953, at the age of eighty.

Dr. Greenman, who retired in 1949, had practiced medicine for fifty years. He was graduated from the University of Michigan Medical School in 1898 and began his practice in Fairmount, North Dakota. He came to Decatur in 1934.

Dr. Greenman is survived by his wife, Christine, and two sons. They are Rial Greenman, serving in the U. S. Navy at Norfolk, Virginia, and George Greenman, a student at the University of Michigan Medical School.

BASTIAN KRUIDENIER, M.D., of Detroit, died February 2, 1953, at the age of sixty-two.

He had practiced medicine in Detroit for twenty years following his graduation from the University of Michigan Medical School in 1932. Dr. Kruidenier interned at Highland Park General Hospital. He was a member of the Wayne County Medical Society.

Dr. Kruidenier is survived by his wife, Edna; two sons, Francis J. Kruidenier and Lt. (j.g.) John R. Kruidenier; and a daughter, Mrs. Raymond Gauss.

GEORGE J. REBERDY, M.D., of Detroit, died February 3, 1953, at the age of sixty-eight.

For the past forty-two years he had practiced medicine in Detroit, first as a general practitioner, then after postgraduate studies in Vienna in 1924-25 as an obstetrician and gynecologist. He received his medical degree from the Detroit College of Medicine and Surgery in 1910.

He was a member of the staff of Harper Hospital, Detroit, from 1910 to 1912. Later he joined the staff of

Say you saw it in the Journal of the Michigan State Medical Society

Providence Hospital, Detroit, in 1913 and remained on the staff until his death.

Dr. Reberdy is survived by three children. They are Nancy Reberdy, Mother Janet Reberdy, R.S.C.J., and George K. Reberdy, M.D., a captain in the U. S. Air Force Medical Corps. He also leaves two sisters and three brothers.

HERMAN A. RIGTERINK, M.D., of Kalamazoo, died February 5, 1953, at the age of eighty-three.

Before retiring in 1946, Dr. Rigterink had served the community of Kalamazoo since 1915. Previous to that he had practiced in Zeeland following his graduation from the University of Illinois College of Medicine in 1907.

Dr. Rigterink was a Life Member of the Michigan State Medical Society and a retired member of the Kalamazoo Academy of Medicine. He had also served on the staffs of Borgess and Bronson Hospitals.

He is survived by his wife, Sena, and two sons, Hollis J. Rigterink, of Lansing, and Gerald H. Rigterink, M.D., of Kalamazoo. He also leaves four brothers. They are George H. Rigterink, M.D., of Hamilton; John W. Rigterink, M.D., of Grand Rapids; Albert E. Rigterink, of Berrien Springs; and Henry Rigterink, of Hamilton.

EDWARD SAWBRIDGE, M.D., of Stephenson, died February 1, 1953, at the age of ninety-two.

Dr. Sawbridge, an Emeritus member of the Michigan State Medical Society, had served the community of Stephenson in the practice of medicine for fifty years before his retirement ten years ago. He was graduated from Rush Medical College, Chicago, in 1893 and came to Stephenson after serving an internship at Cook County Hospital in Chicago.

He was a former president of the Menominee County Medical Society and the Upper Peninsula Medical Society.

During Dr. Sawbridge's lifetime in Stephenson he was also active in civic affairs. He served on the township school board and the village board as well as being instrumental in establishing the Pinecrest Tuberculosis Sanatorium at Powers. Dr. Sawbridge was a member of the Sanatorium Board of Trustees from the time of its founding in 1921 until his death.

He is survived by a son, Robert, of Wisconsin, and three daughters. They are Mrs. John Henes, of Menominee; Mrs. Harry Butts, of Stephenson; and Miss Irene Sawbridge, of California. He also leaves a sister, Mrs. Frederick Luke, of Centralia, Washington, seven grandchildren, and six great grandchildren.

Some acute cases of leukemia present such a uniform picture of extremely immature cells, both in blood and marrow, that they can only be called stem-cell leukemia.

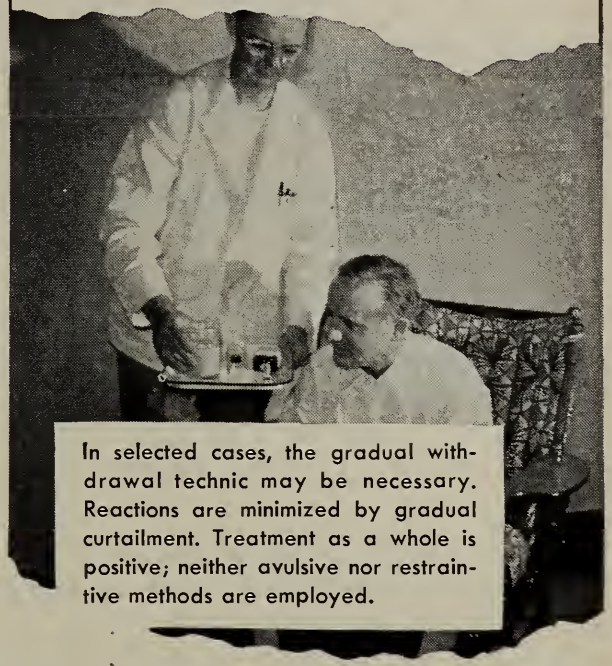
* * *

Any form of radiation may be dangerous in acute leukemia, except minimal employment on small fields for relief of bone pain, swollen tonsils, unhealed biopsy wounds, or cutaneous inflammatory lesions.

* * *

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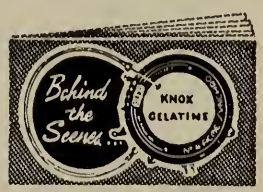


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Communications

Mr. Wm. J. Burns, Executive Director
Michigan State Medical Society
Lansing, Michigan

Dear Mr. Burns:

The Council of the Michigan State Medical Society requested us to search the law covering the question of filing certificates of registration of doctors of medicine, and to communicate our opinion to you in relation thereto.

We are in entire accord with the expressions made by you in your June 23 letter to the County Clerk of Washtenaw County, Ann Arbor. It is our opinion after careful examination of the applicable law, that the requirement for the filing of a certificate of registration of the doctor of medicine, or a certified copy thereof, is solely with the clerk of the county in which such doctor resides. This procedure is provided in Section 338.54, C.L. 1948.

We are further of the opinion that a doctor of medicine is not required to file his certificate of registration, or certified copy thereof, with the clerk of any county other than that of his residence, even though his practice may extend into another county.

Very truly yours,
J. Joseph Herbert, *Legal Counsel*
Michigan State Medical Society

October 21, 1952

* * *

Dear Dr. Haughey:

Again I want to congratulate you on the work you are doing on our State Medical Journal. The January Heart Number is one of the best. The honor extended to Dr. Wilson was one surely due this man who has done so much for our profession. Thanks for your fine work.

Now then, I know that you are in for anything helpful to good health, and so I want to establish a new department in your Journal. Put it under this name if you will,— "The Michigan Medical Society Fire Department."

For years I have been disgusted with some of the habits of the medical profession. If any class of men should try to live up to what they are preaching, the doctors should be the ones to do so. For years the smoking habit has been spreading, especially the cigarette habit. Years ago we heard of some efforts made to fight this malicious habit, but very little is heard now but silence. It is an ordeal for any physician who does not smoke, to stay in some of the medical meetings and breathe the stinking stuff that fills the room. Some of our more recent meetings have made it hard for these cigarette suckers because the Fire Marshall ordered no smoking. It is amusing to watch some of these habitues as they lean over on the sly and light up for a puff or two. The persistence of this thumb sucking, sugar teat, would not be so bad, if it were not doing real damage to their bodies.

Recently, I stirred up a hornet's nest at a blood clinic held in Saugatuck. Someone knowing my allergic rebound to cigarettes got me off on my little lecture. I told them that some years ago a chemistry professor in the University of Illinois had tested all the leading brands on the market and found some form of narcotic in all of them. About three years ago Dr. Curtis of Ann Arbor came to our Allegan County Medical meeting and gave us a talk on the heart. He said they had proved at the University Hospital that cigarette smoking was largely the cause of coronary heart disease as well as Buerger's disease. More recently the great increase of a formerly



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rather infrequent disease, cancer of the lung, has been ascribed to this habit.

After making my little speech, the nurse who was conducting the clinic gave me the "Ha Ha." You know it hurts when you get the laugh. I then asked her if she had any children, whether she would like to have them watch the ads of cigarettes and liquor that are continually poured out on the public in television programs? She did not answer me. Later, one of the clinic party told me that this nurse would smoke two at a time, if she knew how to do it.

Now what I am getting at is, that these nurses, who were collecting blood to save and extend life, were setting an example of how to destroy life and thinking it smart. It seemed like a travesty on what the medical profession stands for.

Two days ago I received from the State Medical Department a communication in regard to a survey of homes with heart patients. It is all very good, but it struck me that the nurse or person making the survey might be smoking a cigarette and perhaps offer one to the patient while she was being shown how to change the kitchen and shelves to save steps. Consistency, thou art a jewel.

As an editorial writer, I know you can hit this thing much harder than I could ever put it across. Some years ago I heard a returned missionary from China, tell that the cigarette manufacturers slogan in China was "a cigarette in the mouth of every man, woman and child." In their advertising on a large billboard they had pictured the Holy Supper, with the statement underneath, that if Judas had used this brand of cigarettes, he would not have betrayed his Master.

Their advertising has been just as revolting here at home. The medical profession has cleaned up many unhealthy conditions. It would seem now that there is one place they should take the lead in cleaning up their own back yard. If we do not take action, someone will be saying that these cigarette smoking doctors are the "Judas goats" leading the public on to the cigarette slaughter.

You have known me long enough to know that I am not a crank, saint or a prude and far from it. Let's get our fire department organized and put out the fire.

With the best of wishes,
EUGENE T. BRUNSON, M.D.

Ganges, Michigan
February 26, 1953

* * *

William Bromme, M.D.
Council Chairman, MSMS
Detroit

Dear Dr. Bromme:

On behalf of the Wayne chapter of the Student American Medical Association, I wish to thank you personally, and through you, the Michigan State Medical Society, for again sponsoring a delegate and an alternate to the National House of Delegates Convention of the SAMA.

The Wayne delegation was priviledged to participate in the SAMA affairs in several matters:

1. Norm Henderson, along with other national officers of the SAMA, had his office extended until June, 1953, the new date for all future annual meetings of the SAMA.
2. The Group from Wayne proposed the following resolution which was unanimously adopted by the convention and appeared in the February 1953 issue of the Student AMA Journal:
   "Whereas, the medical profession has to some extent, sustained increasing adverse comment regarding fees and social and medical responsibilities; and
   Whereas, This criticism may be averted in part by stressing in the medical curriculum of the under-

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graduates the ethics of medicine and the moral principles which support it; and

Whereas, Several medical schools, while listing a course in medical ethics in their catalogs and bulletins, in actuality do not now offer such a course for the instruction of medical students; and

Whereas, It is consistent with the founding purposes of the SAMA to improve standards of medical education and to inculcate in future doctors of medicine the ethics of their profession; Therefore be it

RESOLVED, That the SAMA respectfully request the deans of the several medical schools that where inadequate and ineffective courses in the study of medical ethics exist, and the study of supporting moral principles is deficient, that such a course be included in the best interests of the medical profession and the people whom it serves."

3. I was fortunate enough to receive the chairmanship of the Committee on By-Laws. As a result of the work of this committee several by-laws and amendments were presented and accepted which improved the constitution of the SAMA. About 14% of the published "Proceedings of the Annual Meeting of the SAMA" is devoted to report of this committee which I presented to the convention.
4. Both Norman Henderson and I broke into print. The national publication of the Organization, the *Journal of the SAMA*, carried pictures of us both in different parts of the magazine identifying our capacities in the national organization and stating that we were from Wayne Medical School.

Dr. Bromme, if you wish to see the "Proceedings, et cetera" or wish me to forward it to any interested member of the Michigan State Medical Society, our sponsors, you have only to direct me.

In this letter I am thanking you for your warm, perennial, personal interest in Medical Students at Wayne and I wish to thank you also in your official capacity as an officer of the Michigan State Medical Society. I know you will convey our indebtedness and gratitude to the proper members, committees, and/or officers of your Society on our behalf. The interest of your Society in medical student affairs is most encouraging and flattering. We do sincerely thank the Michigan State Medical Society for their very kind second annual check to defray expenses of the delegate and alternate to the SAMA national convention.

I hope that the points of our participation in the convention enumerated above appear not too immodest. Please understand that we only mean to indicate to you and the Michigan State Medical Society that as you gave us the opportunity to attend the convention so we attempted to take maximum advantage of the privilege.

Respectfully yours,

ROBERT M. NALBANDIAN, *Delegate to 1952 SAMA National Convention*

Detroit, Michigan
February 24, 1953

* * *

Dear Dr. Haughey:

You have my permission to use any part of my letter in any way you see fit.

However, the object of this letter is to compliment you and the Medical Society on the most understanding and progressive statement on the matter of adoption that I have read or heard a physician utter. The editorial is certainly something that should be widely publicized because it clearly points out the many problems involved in child placement.

With your permission, I would like to quote from the editorial as the occasion arises.

Sincerely yours,

EDMUND R. BLASKE
Probate and Juvenile Judge

Marshall, Michigan
February 24, 1953

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MICHIGAN STATE MEDICAL SOCIETY ANNUAL SESSION
September 23-24-25, 1953

MICHIGAN AUTHORS

F. L. Rector, M.D., Secretary of the MSMS Cancer Control Committee, is the author of an article entitled "The Physician's Responsibility in Cancer Control" which appeared in the February, 1953, *Journal of the Student American Medical Association.*

E. S. Gurdjian, M.D., and **J. E. Webster, M.D.**, of Detroit, are the authors of an article, "Strokes Resulting From Internal Carotid Artery Thrombosis In The Neck," published in *The Journal of the American Medical Association,* February 14, 1953.

Jack Lapides, M.D., and **Austin I. Dodson, Jr., M.D.**, of Ann Arbor, are the authors of an article, "Observations on Effect of Methantheline (Banthine) Bromide in Urological Disturbances," published in the *Archives Of Surgery,* January, 1953.

J. M. Sheldon, M.D.; **K. P. Mathews, M.D.**, and **R. G. Lovell, M.D.**, of Ann Arbor, are the authors of an article, "Skin Tests In Atopic Disease," published in *The Journal of the American Medical Association*, March 7, 1953.

Henry K. Ransom, M.D., F.A.C.S., of Ann Arbor, is the author of an article, "Cancer of the Stomach," published in *Surgery, Gynecology and Obstetrics,* March, 1953.

Robert F. Ziegler, Conrad R. Lam, and **Richard E. Shipley** of Detroit, are the authors of an article, "The Diagnosis and Treatment of Congenital Cardiovascular Defects in Infants," published in *Postgraduate Medicine,* February, 1953.

* * *

The "Past Presidents' Room" at MSMS headquarters in Lansing was formally open during the Annual County Secretaries Conference on February 25.

The panel of photographs of all MSMS Past Presidents was displayed in the first floor room of the Executive Offices. The pictures date back to 1866.

All MSMS members are cordially invited to visit the MSMS home and exhibit when in Lansing.

* * *

Alexis St. Martin, whose open stomach furnished Dr. Beaumont an opportunity for studying directly the processes of gastric digestion, is still living at St. Thomas, Canada. He is described as hale and hearty at the age of 87, though the orifice in his stomach is still open. It will be remembered that the wound was the result of a charge of buckshot accidentally received, laying open the stomach so that food could be injected and removed at will by the attending physician, whose observations were of such great value to medical science. It is now 57 years since the accident occurred.—Extract from *Scientific American* of August 2, 1879.

* * *

A Bruce H. Douglas Memorial Fund, in honor of the late Dr. Douglas who served Detroit as Commissioner of Health, has been created by the Woman's Committee of the Tuberculosis and Health Society of Wayne County. Qualified candidates may be awarded up to $2,000.00 for graduate study in health education or in medical social work. For information, write the TB and Health Society, 153 E. Elizabeth, Detroit 1, Michigan.

* * *

The AMA Special Committee to be of assistance to the Federal Security Agency is composed of E. L. Henderson, M.D., Louisville, Kentucky, Chairman; L. H. Bauer, M.D., Hempstead, New York, Vice Chairman; Edward J. McCormick, M.D., Toledo; Dwight H. Murray, M.D., Napa, California, and F. J. L. Blasingame, M.D., Wharton, Texas. Walter B. Martin, M.D., Norfolk, Virginia, is the alternate member. This committee was appointed following the February 3 meeting with Federal Security Agency Administrator Oveta Culp Hobby who asked the AMA representatives for the appointment of such a committee.

* * *

Krebiozen: The Illinois Legislature will investigate Krebiozen, the controversial cancer drug, first introduced by Andrew C. Ivy, M.D., Chicago. Hearings are scheduled to be held in Springfield.

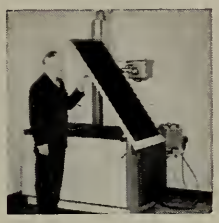
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The special meeting of the AMA House of Delegates, in Washington, D. C., on Saturday, March 14, was called to determine the policy of the AMA in relation to President Eisenhower's proposal to make the Federal Security Agency a government department with Cabinet status (including health and education).

The March 14 meeting of the House of Delegates was the eighth to be held in the nation's capital; the fourth such special meeting in the association's history; the first time that a special meeting of the House of Delegates ever was held outside of Chicago.

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The President's reorganization plan calls for elevation of the Federal Security Agency to a Cabinet Department of Health, Education and Social Security. This proposal would come up for Congressional action before the next regularly scheduled meeting of the House of Delegates in June, 1953—so the special meeting was called in March.

* * *

Willard F. Greenwald, who had many friends in the medical profession because of his work as a scientific consultant, passed away at his home in Woodmere, Long Island, New York, on February 28, 1953. Mr. Greenwald, who carried on pioneering research for industrial firms, was best known for his work with Philip Morris and Company. He is survived by a widow, a daughter, and a son, Willard F. Greenwald, Jr., M.D.

The medical profession has lost a good friend in "Bill" Greenwald.

* * *

The MSMS Child Welfare Committee, at its February 11 meeting, requested that the following important item be published in JMSMS.

"For the purpose of detecting and treating retro-lental fibroplasia, the Child Welfare Committee recommends that all premature infants under four pounds be examined by an ophthalmologist within two weeks following birth, and periodically at least every two weeks thereafter."

* * *

Hack Shoe Company has purchased a lot on Livernois Avenue, a block north of its present store.

It is planned to commence building immediately, according to Leonard Hack, secretary-treasurer of the thirty-seven-year-old firm.

The move will provide more stock space as well as a larger fitting room, needs dictated by the highway satisfactory growth in the stores' business since the opening of the firm's Livernois Branch three and one-half years ago.

* * *

Warren R. Mullen, M.D., Muskegon, first President of the Student American Medical Association, who was graduated from the University of Michigan Medical School in June 1952, will begin the practice of medicine in Pentwater, July 1, 1953. Dr. Mullen is a graduate of

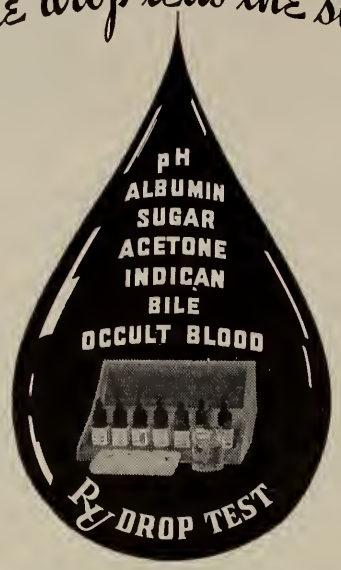
Beaumont Memorial. "I intended giving $50.00 to the Beaumont Memorial Fund but Dr. Otto O. Beck's statement, 'A little from many' influenced me in giving only $10.00 as I felt every doctor of medicine in Michigan would surely over-subscribe the sum required to restore the old building on Mackinac Island.

"Perhaps others acted as I have for the same reason.

"I am enclosing check for $40.00 with the prayer that the Spirit of Beaumont will inspire our Michigan profession to raise the required amount proudly and quickly.

"So—sincerely,

ROBERT W. GILMAN, M.D., Detroit."



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Surgical Technic, Surgical Anatomy and Clinical Surgery, four weeks, starting June 1.
Surgical Anatomy and Clinical Surgery, two weeks, starting June 15, August 17.
Gallbladder Surgery, ten hours, starting April 20.
Surgery of Colon and Rectum, one week, starting April 13.
General Surgery, one week starting May 4.
General Surgery, two weeks, starting April 20.
Thoracic Surgery, one week, starting June 8.
Breast and Thyroid Surgery, one week, starting June 22.
Esophageal Surgery, one week, starting June 22.
Fractures and Traumatic Surgery, two weeks, starting June 15.
GYNECOLOGY—Intensive Course, two weeks, starting April 20.
Vaginal Approach to Pelvic Surgery, one week, starting May 4.
OBSTETRICS—Intensive Course, two weeks, starting June 8.
PEDIATRICS—Congenital Heart Disease, two weeks, starting May 18.
Cerebral Palsy, two weeks, starting June 15.
MEDICINE—Intensive General Course, two weeks, starting May 4.
Electrocardiography and Heart Disease, two weeks, starting May 4.
Allergy, one month and six months, by appointment.
CYSTOSCOPY—Ten-day Practical Course starting every two weeks.
DERMATOLOGY—Intensive Course, two weeks, starting May 11.

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the U. S. Naval Academy (1943) and served as a Navy pilot during the war.

* * *

F. C. Swartz, M.D., Lansing, addressed the Barry County Medical Society at Hastings on "Geriatric Philosophy" on April 21.

* * *

The Michigan State Medical Assistants Society will hold its convention at the Morton House, Grand Rapids, on Wednesday and Thursday, September 23 and 24, 1953. The nurses and secretaries of all MSMS members are cordially invited to attend the MSMAS convention. The tentative program is as follows:

Wednesday, September 23

9 -10	Registration
9:30	Executive Board Meeting
10-12	Speakers
12:30	Free luncheon
2:00	Business meeting
6:00	Cocktail hour
7:30	Banquet—speaker

Thursday, September 24

9 -10	Registration
10-12	Speakers
12:30	Presidents' Luncheon (Style Show)
2:00	Speakers
3:00	View Exhibits

The Michigan State Medical Assistants Society and the Advisory Committee of the Michigan State Medical Society have determined that the immediate project of the Medical Assistants Society is to gain additional members throughout Michigan. Therefore the MSMS Advisory Committee recommended that all doctors of medicine be urged to speak to their assistants regarding membership and, wherever the number warrants, the forming of a constituent society. Local societies exist in Detroit, Lansing, Grand Rapids, Saginaw, Bay City, Muskegon, Kalamazoo and Allegan.

Active membership is open to any eligible person actively employed in the office of a member of the Michigan State Medical Society, in hospitals accredited by the AMA, and in medical laboratories of the State of Michigan. The organization is declared to be non-profit.

The object of the society is to train its members to be more efficient in their services to the public and to the medical profession.

Further information regarding membership in the Michigan State Medical Assistants Society may be obtained from Miss Katherene Brown, 542 Maccabees Bldg., Detroit 2, Michigan.

* * *

Joseph A. Navarre, J.D., State Insurance Commissioner, addressed the monthly staff conference of Woman's Hospital, Detroit, on March 6. His subject was "Hospital Care and Hospital Costs."

* * *

Fedora Protar, who provided medical care for the residents of Beaver Island beginning in 1892, was hon-

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Adult	2.50	5.00	7.50	10.00
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ored on March 4, the twenty-eighth anniversary of his death. A bronze tablet on the lonely grave of Dr. Protar, who is believed to have been a Russian refugee, reads:

> "To our heaven-sent friend in need, Fedora Protar, who never failed us. In imperishable gratitude and adoration. His people of Beaver Island."

The 1953 pilgrimage of Beaver Island residents to Protar's grave coincided with the good news that Harry Vail. M.D., of Bay City will be their new doctor, succeeding Russell Palmer, M.D., who retired after twenty-eight years of service.

* * *

Year-round Medical Class.—Seniors at the University of Michigan Medical School will begin year-round classes June 23.

The class of 150 will be split into five groups of thirty each, with four groups in attendance and one on vacation. The year will be divided into five nine-week periods separated by a week-long rest period.

Thus, at some time during the year, each senior student will have a holiday of from eleven to thirteen weeks. The only time the school will not be in session will be during the two-week Christmas period.

Dean Albert C. Furstenberg said the change will give seniors a better chance to obtain externships.

* * *

The Combined Armed Forces Medico-Military Symposium for all armed forces is to be held at the U. S. Naval Hospital, Great Lakes, Illinois, May 6, 7 and 8, 1953. For program, write Capt. W. H. Schwartz, M.C., USN., Chairman, Program Committee, at the Naval Hospital.

* * *

Harold C. Mack, M.D., Detroit, has been chosen President-Elect of the Central Association of Obstetricians and Gynecologists which will hold its next meeting in Houston, Texas, on November 5, 6 and 7, 1953.

* * *

The first Beaumont Memorial Lecture of the Michigan State Medical Society will be given on the occasion of the MSMS Annual Session in Grand Rapids, September 23, 24 and 25, 1953. This new lectureship will commemorate the pioneer work done in Michigan by Dr. William Beaumont, who began his physiological experiment on Mackinac Island in 1822.

It is most fitting that the Beaumont Memorial Lecture be created in 1953, as this year marks the 100th anniversary of the death of Dr. Beaumont.

* * *

John R. Rodger, M.D., Bellaire, and **H. B. Zemmer, M.D.**, Lapeer, were official representatives of the Michigan State Medical Society and of the Michigan Health Council, respectively, at the National Health Council annual meeting in New York on March 18 and 19.

* * *

At the American College of Surgeons Inter-American Session in Sao Paulo, Brazil, Michigan was represented by Don F. Cudner, M.D., Elmore F. Lewis, M.D., E. W. McGarvey, M.D., Philip A. Riley, M.D., John Van Schoick, M.D., all of Jackson, Michigan; F. J. Melges, M.D., Battle Creek, and B. F. Glowacki, M.D., Detroit.

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The American Goiter Association will hold its 1953 meeting at the Drake Hotel, Chicago, May 7, 8 and 9. The program will deal with goiter and other diseases of the thyroid gland. For information, write George C. Shivers, M.D., Colorado Springs, Colorado.

* * *

The American Medical Association Annual Session will be held in New York City, June 1-5, 1953. Headquarters will be the Grand Central Palace.

* * *

The International College of Surgeons announces plans for a worldwide Surgeons' Hall of Fame to be established in the world headquarters of the IC of S in Chicago. This Hall of Fame will commemorate the contributions by surgeons to the life and health of human beings. The site of the Hall of Fame will be the recently purchased limestone mansion at 1520 Lake Shore Drive, Chicago, next to the headquarters of the College.

* * *

James Devereaux, 904 Riker Building, Pontiac, is the new Executive Secretary of the Oakland County Medical Society, appointed as of January 1, 1953.

Congratulations, Oakland County members, on this progressive step.

* * *

C. Paul Hodgkinson, M.D., Detroit, was elected Secretary of the American Academy of Obstetrics and Gynecology at its recent annual meeting in Chicago.

Dr. Harvey M. Merker of Parke, Davis & Co., Detroit, recently was elected president of the Detroit Library Commission.

Dr. Merker will be remembered as one of the guest speakers at the Beaumont Memorial Breakfast, sponsored by the Michigan State Medical Society in Detroit, September 25, 1952.

* * *

The Upper Peninsula Medical Society will hold its 1953 meeting in Escanaba on Friday and Saturday, June 19 and 20. Louis P. Groos, M.D., of Escanaba, is president and N. L. Lindquist, M.D., of Escanaba, is secretary of the UP Medical Society.

* * *

Central Association of Obstetricians and Gynecologists.—The Central Association of Obstetricians and Gynecologists announce the election of the following officers: President: W. O. Johnson, M.D., Louisville, Ky.; President-Elect: Harold C. Mack, M.D., Detroit, Mich.; Vice President: Arthur B. Hunt, M.D., Rochester, Minn.; Secretary-Treasurer: Harold L. Gainey, M.D., Kansas City, Mo.; Assistant Secretary: Woodard D. Beacham, M.D., New Orleans, La.

These officers will serve until the end of the Annual Meeting which will be held at the Shamrock Hotel, Houston, Texas, on November 5-7, 1953.

The business office of the Central Association of Obstetricians and Gynecologists is located in Suite 602,

Say you saw it in the Journal of the Michigan State Medical Society

116 So. Michigan Avenue, Chicago 3, Illinois. The office of Dr. Harold D. Gainey, Secretary-Treasurer, is located at 4635 Wyandotte Street, Kansas City, Missouri.

* * *

Aid To Dependent Children.—The Michigan Department of Social Welfare which adminsters the Old Age Assistance, aid to Dependent Children, and rehabilitation, requests that Doctors of Medicine who have to make out any of their reports be especially careful in filling out the blanks so the Medical Advisor may have a picture sufficient to determine the exact condition and needs. This holds especially for dependent children when he must determine if the child is dependent. Is the parent able to work? Give precise diagram of the employability. Much depends on this co-operation, as there are proper sources of aid if the case is not one of dependence due to no parent or one not employable.

* * *

1953 Industrial Health Conference.—The 1953 Industrial Health Conference was held in Los Angeles, April 18 to 25, 1953.

There was a joint meeting of the Industrial Medical Association, American Conference of Governmental Industrial Hygienists, American Industrial Hygiene Association, American Association of Industrial Dentists, and American Association of Industrial Nurses.

These items of interest to Michigan appeared on the program.

"Industrial Hygiene for Small Industry and the Solitary Worker"—W. G. FREDRICK, Sc.D., Bureau of Industrial Hygiene, Detroit Department of Health, Detroit, Michigan

Forum Discussion—"The Function of Industrial Dentistry." Discussion Leader: GRANT U. MACKENZIE, Dental Director, Ford Motor Company, Dearborn, Michigan

Session Arranger: BENJAMIN LINSKY, Chief, Smoke Abatement Bureau, Department of Buildings and Safety Engineering, Detroit, Michigan

"The Detroit Air Pollution Control Program"—BENJAMIN LINSKY, Chief, Smoke Abatement Bureau, Department of Buildings and Safety Engineering, Detroit, Mich. (film with live commentary)

"The Toxicology of Monomethyl Ethers of Mono, Di and Tripropylene Glycols (Dowanol 33B, 50B, 62B respectively)"—V. K. ROWE, H. C. SPENCER, Ph.D., D. D. MCCOLLISTER, F. OYER and R. L. HOLLINGSWORTH, Dow Chemical Company, Midland, Mich.

Session Arranger: WALTER H. KONN, Industrial Hygiene Department, General Motors Research Laboratories, Detroit, Mich.; Co-chairmen to be announced.

"Community X-Ray Hazards"—W. G. FREDRICK, Sc.D., Bureau of Industrial Hygiene, Detroit Department of Health, Detroit, Mich.

"Case Histories of Collector Efficiency Measurement Studies at Ford Motor Company"—J. C. RADCLIFFE and W. F. DELHEY, Industrial Health Unit, Ford Motor Company, Dearborn, Michigan

* * *

American Board of Obstetrics and Gynecology.—The Directors of the American Board of Obstetrics and Gynecology wish to express their thanks to the following gentlemen who responded so willingly to our request for help in proctoring the recent written examinations, February 6, 1953.





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Among the long list of names submitted are: Henry W. Clapp, M.D., Muskegon; George Kamperman, M.D., Detroit; Reynold L. Haas, M.D., Ann Arbor; F. W. Tamblyn, M.D., Lansing; Athol B. Thompson, M.D., Grand Rapids, and Clarence E. Toshach, M.D., Saginaw.

The next scheduled examinations, Part II (oral and pathological) for all candidates will be held at The Edgewater Beach Hotel, Chicago, Illinois, by the entire Board, May 17 through 24, 1953. Formal notice of the exact time of each candidate's examination will be sent him several weeks in advance of the examinations.

Applications for Certification for the 1954 (Part I) examinations are now being accepted, and candidates are urged to make such application some time in August or September. This would be of great help in expediting processing of these applications.

Requests for Applications for Appraisal of Incomplete Training Applications for Certification, current Board Bulletins, and Preceptorship or Supplemental Training Forms should be made to: Robert L. Faulkner, M.D., Secretary, American Board of Obstetrics and Gynecology, 2105 Adelbert Road, Cleveland 6, Ohio.

* * *

Edmond L. Cooper, M.D., of Detroit, has been re-elected President of the Detroit Society for the Prevention of Blindness. Other physicians serving on the Board of Directors of the Society are Cecil W. Lepard, M.D., A. D. Ruedemann, M.D., Nelson Taylor, M.D., and Joseph Molner, M.D.

Pediatric Problem in Michigan.—

Motion: "In the interest of improving child health, the Child Welfare Committee of the Michigan State Medical Society recommends that the MSMS supports such activities as would improve and insure good intern training programs particularly in child care and further, that the MSMS recommend that those hospitals approved for internships comply with the regulations set forth by The Council on Hospitals and Education of the American Medical Association Governing Intern Training. Carried."

This action of the Child Welfare Committee was approved by the Executive Committee of the Council. In the whole State of Michigan there is one doctor to each 915 residents, but outside of Wayne County the ratio is one to 1,490 persons. There are thirty-three Michigan hospitals approved for intern training, with 513 internships available, but only 300 of these were filled in 1952. Sixty per cent of interns stay in or near the place of training. The February 27, 1953, JAMA announced the new ruling that if after two years a hospital has had no interns the approval may be revoked. Seventy per cent of the maternity and children's illnesses are cared for by general practitioners while approximately 45 per cent of physicians have had no pediatric training after their internship. It is hoped that the MSMS should guarantee a complete training by actively promoting the provision of training in the four major practices: Obstetrics, Pediatrics, Medicine and Surgery. The expression was that interns are not at hospitals for service, but for educational training, and that all doctors practicing and all hospitals and patients should be a part of this program.

Say you saw it in the Journal of the Michigan State Medical Society

THE DOCTOR'S LIBRARY

Acknowledgment of all books received will be made in this column, and this will be deemed by us as full compensation to those sending them. A selection will be made for review, as expedient.

VIRAL AND RICKETTSIAL DISEASES. 2nd Edition. Edited by Thomas M. Rivers, M.D., Director of Hospital, Rockefeller Institute for Medical Research. 719 pages. Illus. Philadelphia: J. B. Lippincott Co., 1952. Price $7.50.

As knowledge grows in the field of viral and rickettsial diseases, the need is great for a source of information which is reliable and one that is frequently brought to date. Such a source can be found in the new text published by the J. B. Lippincott Company and edited by Thomas M. Rivers, M.D.

This is the second edition and is titled "Viral and Rickettsial Infections of Man." The text was made possible by direct subsidy from the National Foundation for Infantile Paralysis, Incorporated, and lists as contributors outstanding research workers as it would be impossible for any one man to write with authority about all the diseases and their casual agents reported.

The text is not a research manual but is intended for medical students and physicians. It does report methods and history which are intended as collateral background information in this field. Its value to physicians lies in the demonstration of laboratory difficulties encountered and the proper methods and sampling procedures when diagnosis is necessary.

The organization of each report is interesting and practical. It consists of an introduction, history, clinical picture, pathologic picture, experimental infection, etiology, diagnosis, treatment, epidemiology and control measures. The last two are included to give a complete picture of viral and rickettsial infections for medical students and physicians.

Certain sections of the first edition have been deleted in the new text since their causative agents have been found to be other than viruses and rickettsiae.

Discussion of the newly discovered Coxsackie viruses are included and there are new chapters on viral hemaglutination and interference between animal viruses.

Valuable information for the practice of medicine is scattered throughout the book and at times either student or physician may have difficulty in finding it in a usable form. In an effort to overcome some of this difficulty, an integration of knowledge about viral and rickettsial infections of man has been attempted in a special chapter on diagnosis.

OPERATING ROOM TECHNIC, St. Mary's Hospital, Rochester, Minnesota. Fourth Edition. Illustrated. Philadelphia: W. B. Saunders Co., 1952.

Years ago a cyclone and an urgent request by the Doctors Mayo to the Sisters of Saint Francis for help in caring for the injured, brought about the construction of the St. Mary's Hospital at Rochester, Minnesota. St. Mary's is a unique institution. Once a nun enters St. Mary's, she devotes a lifetime to nursing within the walls of the hospital. For example, the nun who edited



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the third revision in 1937 and who was affectionately known as Sister "Bill," labored seven days a week and many a night for forty-odd years in the operating rooms.

With this background then, it will become quite clear to the reader that the technics presented are the ones in daily use by Mayo Clinic surgeons. The text itself is clear and concise. The present volume has been completely rewritten. New sections on Urology and Peroral Endoscopy have been added. The text contains many excellent illustrations. Little gems of surgical wisdom will be found from time to time in the paragraphs describing procedure. This book is recommended as a text for teaching operating room nursing personnel and for interns and residents. The general surgeon could well find a spot for it in his own library.

J.W.H.

GIFFORD'S TEXTBOOK OF OPHTHALMOLOGY. By Francis Heed Adler, M.D., Professor of Ophthalmology, University of Pennsylvania Medical School; Consulting Surgeon, Wills Eye Hospital, Philadelphia. Fifth Edition. Illustrated with 281 colored figures and 26 color plates. Philadelphia: W. B. Saunders Co., 1952.

This book will meet the needs of the undergraduate student of ophthalmology and at the same time, gives the general practitioner a ready reference for his needs about opthalmological problems. The whole book is carefully written and the author gives practical information to the general practitioner about eye problems that may arise in his daily practice. That section that deals with hypertensive diseases and diabetes, together with diseases of the optic nerve, is worth the price of the book.

W.S.J.

A MANUAL OF CLINICAL ALLERGY. Illustrated. By John M. Sheldon, M.D., Professor of Internal Medicine, University of Michigan Medical School; Assistant to the Chairman of the Department of Postgraduate Medicine; Physician in Charge of University of Michigan Allergy Clinics; Director of The Montgomery Allergy Research Laboratory; Robert G. Lovell, M.D., Instructor in Internal Medicine, University of Michigan Medical School, and Kenneth P. Mathews, M.D., Assistant Professor of Internal Medicine, University of Michigan Medical School. Philadelphia: W. B. Saunders Co., 1953. Price $8.50.

We have received this book by our own Dr. Sheldon of Ann Arbor with a great deal of interest. We first turned to comments about house dust. Dr. Sheldon is modest. He makes no mention of the history of the house dust problem. The reviewer was his first patient in the determination of the causative factor of house dust in allergy. We took the contents of a carpet sweeper to Ann Arbor. Dr. Sheldon had it processed, a vaccine made and gave the reviewer great relief.

The matter of food allergies was also of interest. The reviewer was sensitive to almost all foods. What to avoid? Almost all of them. However, we worked out an elimination diet which provided an ultimately satisfactory diet. Dr. Sheldon might claim this pioneer-

ing research. (We have asked him to write it for the use of THE JOURNAL, but without success.) We are now giving him credit for two pioneering factors in allergy. We are happy to have this very up-to-date and useful book.

W.H.

ORAL ANATOMY. By Harry Sicher, M.D., D.Sc., Professor of Anatomy and Histology, Loyola University School of Dentistry, Chicago College of Dental Surgery; Guest Lecturer, Northwestern University, Dental School, Chicago. With 310 Text Illustrations including 24 in color. Second Edition. St. Louis: The C. V. Mosby Co., 1952.

This book is written primarily for students of dentistry and oral surgery to supplement their study of dental and human anatomy. Readers will find that it contains concise basic anatomy of the head and neck with elaboration on the portions specifically essential for dentists and oral surgeons.

The text is divided into two parts. The first portion deals with descriptive anatomy of the bones of the skull, and soft tissue of the head and neck. The chapter on the temporomandibular articulation is particularly well covered. The second portion deals with regional and applied anatomy of the same structures with special emphasis on the anatomy of alveolar processes and the anatomy of local anesthesia. The chapters entitled The Propagation of Dental Infections and The Temporomandibular Articulation should be of particular interest to dental surgeons.

Dentists, oral surgeons, and otolaryngologists will find this book to be a valuable adjunct in their studies.

W.S.J.

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ARTIFICIAL INSEMINATION

(Continued from Page 423)

wife, the child and the donor are all in an unsatisfactory position with respect to the law. Statutes will have to be enacted, either regulating the practice and outlining the rights and liabilities of the parties concerned, or making the practice a criminal offense. As a practical matter the latter is not to be anticipated, for the reason that the practice has become too widespread, and the judicial comment in this country has been too favorable.

There has been no attempt here to consider the effect of conflict of laws on the status of a child conceived by AID. That problem is one that will come with the statutory determination of the status of the child, and it suggests some interesting possibilities. My own conclusion is that adoption is the best way to bring wanted children into the childless home.

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DON'T ROCK THE BOAT

(Continued from Page 440)

Few years some doctors have been convicted of income tax evasion. Some months ago we commented in these columns that income tax inspectors were going through medical men's income tax reports with special attentiveness. We repeat the warning.

The medical profession of Michigan has reason to be proud of its accomplishments in many fields. There are no more devoted doctors of medicine in the whole country, and none able to give better health and contentment to our public. We have favorable relations with ourselves and our people. It behooves us to take extra precautions to preserve the good repute and good returns which are ours. One small mishap or misstep can undo the good esteem which cost hundreds of thousands of dollars to establish, and which it might not be possible to re-establish.

We congratulate our members on their good will. We bespeak a continuance of it. But **Don't Rock The Boat.**

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INDEPENDENT MEDICAL EXPERTS TO TESTIFY IN INJURY CASES

(Continued from Page 441)

paid $50 for each examination. The plan budgeted $6,000 for a paid director to supervise the program and to prepare a report on its results. Professor Delmar Karlen of the Institute of Judicial Administration at New York University Law School has been obtained to direct the project.

The *New York Heard Tribune* calls it a "development to be cheered."

THE JOURNAL
of the Michigan State Medical Society

VOLUME 52 MAY, 1953 NUMBER 5

Contributors to This Issue



J. J. Lightbody, M.D.



A. Hazen Price, M.D.



W. S. Reveno, M.D.



F. C. Swartz, M.D.



F. A. Weiser, M.D.

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THE JOURNAL
of the Michigan State Medical Society

VOLUME 52 MAY, 1953 NUMBER 5

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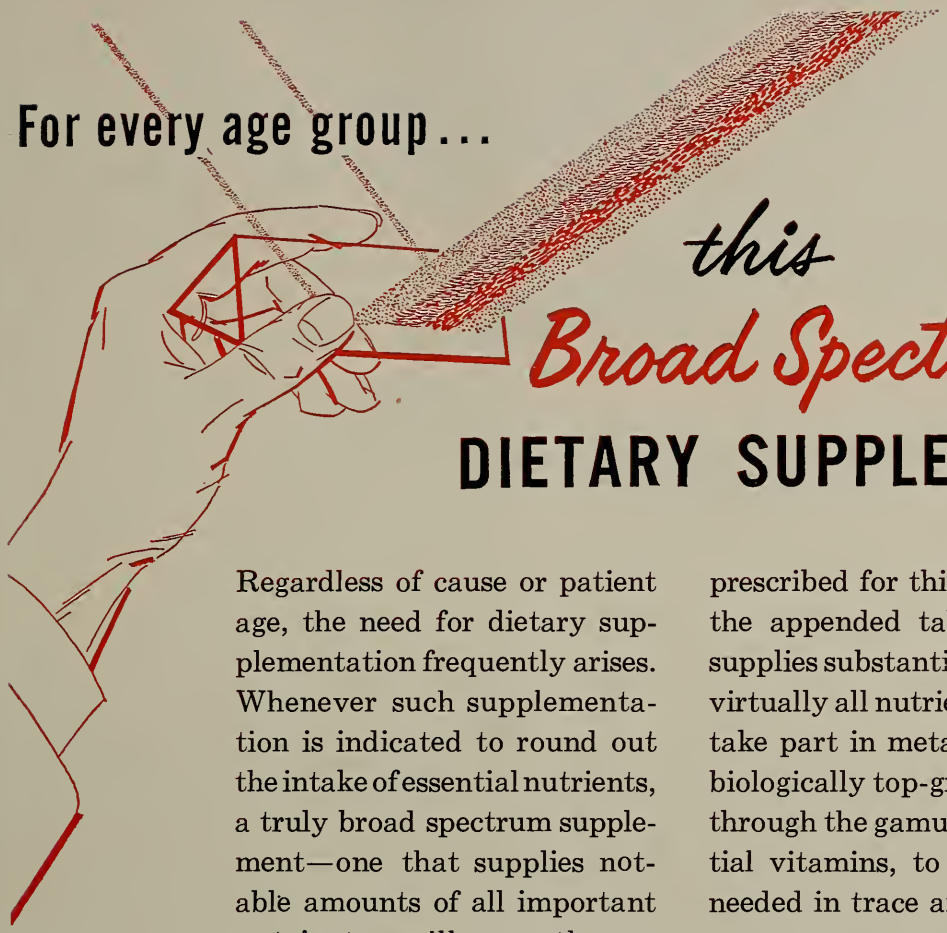
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COBALT	.0.006 mg.	CHOLINE	200 mg.
*COPPER	0.7 mg.	FOLIC ACID	0.05 mg.
FLUORINE	3.0 mg.	*NIACIN	6.7 mg.
*IODINE	0.15 mg.	PANTOTHENIC ACID	3.0 mg.
*IRON	12 mg.	PYRIDOXINE	0.6 mg.
MAGNESIUM	120 mg.	*RIBOFLAVIN	2.0 mg.
MANGANESE	0.4 mg.	*THIAMINE	1.2 mg.
*PHOSPHORUS	940 mg.	*VITAMIN A	3200 I.U.
POTASSIUM	1300 mg.	VITAMIN B_{12}	.0.005 mg.
SODIUM	560 mg.	*VITAMIN D	420 I.U.
ZINC	2.6 mg.		

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HIGHLIGHTS OF EXECUTIVE COMMITTEE OF THE COUNCIL

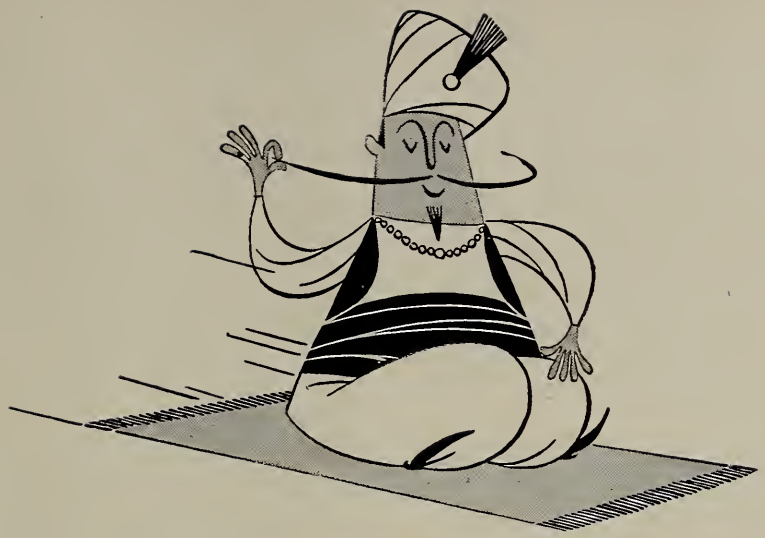
Meeting of March 18, 1953

Seventy-one items were presented to the Executive Committee of The Council on March 18. Chief in importance were:

- *Committee Reports.*—The following were given consideration: (a) Geriatrics Committee, meeting of February 17; (b) Mental Hygiene Committee, meeting of February 18; (c) Special Advisory Committee to Public Relations Counsel, meetings of February 18 and 26; (d) Advisory Committee to State Social Welfare Commission; (e) Joint Committee on Study of Medical Examiner Bill, meeting of February 20; (f) Committee to Study Referral Policy at University of Michigan Hospital, meeting of March 4; (g) Ubiquitous Hosts of M.C.I., meeting of March 4; (h) Rheumatic Fever Control Committee, meeting of March 4; (i) Tuberculosis Control Committee, meeting of March 4.
- The Executive Committee of The Council expressed its appreciation to W. J. Maxey, Lansing, Director of the Michigan Social Welfare Commission, for co-operative effort and experienced help and sound advice in developing a release from liability for divulging confidential communications.
- The Secretary reports that the American Academy of Pediatrics, Michigan Branch, had endorsed the Michigan Rheumatic Fever Control Program, at its meeting in Detroit on March 12.
- The Beaumont Memorial Committee of the State of Michigan (Messers. W. F. Doyle, D. Hale Brake and Joseph Thompson) were thanked for check in the amount of $834.19 payable to the MSMS Beaumont Memorial Fund; this check represented the balance in the State Fund after purchase of the Earley property on Mackinac Island from funds contributed by Parke, Davis & Company, Detroit.

  The sum contributed by members of the Michigan State Medical Society for the Beaumont Memorial construction on Mackinac Island totalled $29,000.09 as of March 18.
- J. M. Wellman, M.D., Lansing, on behalf of Frederick A. Coller, M.D., Ann Arbor, President of the Michigan Chapter, American College of Surgeons, requested co-operation in holding a first meeting of the Michigan Chapter, A.C.S. in Grand Rapids on the Tuesday preceding the MSMS Annual Session (Tuesday, September 22). The Executive Committee of The Council welcomed the relation of MSMS with the Michigan Chapter of the American College of Surgeons, as proposed, and offered all co-operation, and assistance.
- Bills payable were presented, and payment was authorized.
- Wm. A. Hyland, M.D., Grand Rapids, Chairman of the Michigan Delegation to the AMA House of Delegates, reported on the Special meeting of the AMA House of Delegates in Washington, March 14, on the subject of Cabinet rank for Secretary of Social Security, Health and Education.
- C. D. Barrett, M.D., Detroit, was appointed to the Maternal Health Committee; Frank L. Doran, M.D., Grand Rapids, to the Advisory Committee to State Social Welfare Commission; E. C. Swanson, M.D., Vassar, to the Michigan State Medical Assistants Advisory Committee; J. B. Hassberger, M.D., Birmingham, Chairman; J. L. Law, M.D., Ann Arbor, and A. L. Richardson, M.D., Detroit, members of the Subcommittee on Accident Prevention (a committee of the MSMS Child Welfare Committee); F. C. Swartz, M.D., Lansing, to the Michigan Nutrition Council; John R. Rodger, M.D., Bellaire, was appointed official representative of MSMS to attend the National Health Council annual meeting in New York, March 17-19.
- President R. J. Hubbell, M.D., Kalamazoo, was authorized to attend the Annual Session of

(Continued on Page 472)



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HIGHLIGHTS OF THE EXECUTIVE COMMITTEE

(Continued from Page 470)

the Ohio State Medical Association in Cincinnati on April 21-23 as official MSMS representative.

- C. A. Paukstis, M.D., Ludington, Councilor of the 11th District, was authorized to represent MSMS at the annual convention of Student Branch of American Pharmaceutical Association, in Big Rapids, April 23-25.
- J. S. DeTar, M.D., Milan, was appointed MSMS representative to attend the Workshop conducted by the Commission on Financing of Hospital Care, Chicago, April 24-25.
- Thanks was extended by the Executive Committee of The Council to all who helped to make successful the 1953 Michigan Clinical Institute which had a record attendance of 2,283.
- Wilfrid Haughey, M.D., Battle Creek, was appointed Chairman of the 1954 Michigan Clinical Institute, scheduled for Detroit, March 10-12, 1954.
- The Public Relations Counsel reported on current legislation in the State Legislature; on the publicity during the 1953 M.C.I.; and on the prospects for making a film on Personal Health Appraisal, without cost to MSMS.
- The Subcommittee on Final Plans, Beaumont Memorial Working Committee, reported on details of a contract worked out with Mr. Ely Van Sweden who is ready to begin construction April 1, 1953.
- The Committee on Study of Health and Accident Insurance Program reported on its meeting of March 18 with a representative of the Chicago insurance brokers.
- Matters of mutual interest were discussed with State Health Commissioner A. E. Heustis, M.D., including two legislative proposals.
- The monthly report of Rheumatic Fever Coordinator Leon DeVel, M.D., Grand Rapids, was approved.
- Thanks were extended to Dr. and Mrs. E. I. Carr, Lansing, for preprandial hospitality in their home.

TWELVE PER CENT OF DOCTOR'S TIME GOES TO CHARITY PATIENTS

The average United States physician gives seven hours a week—12 per cent of his working hours—to charity patients. The dollar value of the charity work he does in a single year is more than $3,000.

These figures are revealed in the April issue of *Medical Economics,* national business magazine for doctors The magazine is publishing the results of a nationwide survey it made recently among its 134,000 physician-readers.

According to the survey, about seven out of ten doctors today do some charity work. High-income physicians tend to do more of this work than low-income physicians; and big city doctors, more than those in small towns.

The magazine also found that the average medical man, besides giving *time* to charity, gives $623 a year in *cash.*

PHYSICIANS' COLLECTIONS SHOW SLIGHT DECLINE

The average United States physician collected 85 per cent of the bills owed him by patients last year—a decline of three percentage points in his rate of collections since 1948.

So states the March issue of *Medical Economics,* which is publishing the results of a nationwide survey of medical practice, based on a questionnaire sent to each of its 134,000 physician-readers.

The magazine also found that the average doctor nowadays takes in $2,601 a year from Blue Shield and other health plans. This amounts to about 11 per cent of his gross income.

FORMER MEDICAL OFFICERS SURVEYED

In analyzing 467 questionnaires returned by former armed forces medical officers, the Council on National Emergency Medical Service has extracted pertinent data on percentage of time spent in treatment of military personnel and their dependents, staffing conditions and the number of physicians willing to remain in service.

The survey of former army, navy and air force physicians shows:

1. *Percentage of time.*—Between 44 and 54 per cent of total overseas time was spent in treatment of military personnel and between 39 and 53 per cent of total domestic time. Treatment of

(Continued on Page 474)

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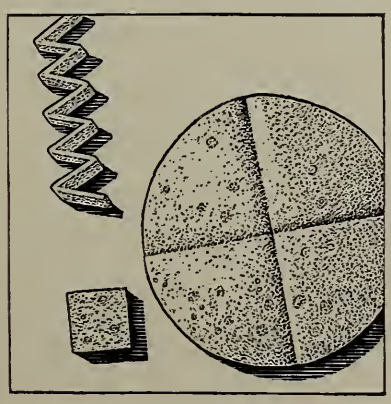
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FORMER MEDICAL OFFICERS SURVEYED

(Continued from Page 472)

dependents took between 19 and 28 per cent of overseas time and between 25 and 44 per cent of domestic time.

2. *Staffing conditions.*—Overstaffing (136 replies) ranged from 15 to 44 per cent. Understaffing (seventy-nine replies) ranged from 15 to 28 per cent. Adequate (227 replies) ranged from 42 to 58 per cent.

3. *Willing to stay in service.*—214 replied yes; 236, no.

The Council will continue to send out questionnaires to physicians as they return to civilian life. —*AMA News Notes.*

HOUSE OF DELEGATES SUPPORTS NEW FEDERAL DEPARTMENT

The American Medical Association is supporting President Eisenhower's plan for a new Department of Health, Education and Welfare as a "step in the right direction," but at the same time is reaffirming its stand in favor of the ultimate formation of an independent Department of Health. This policy decision was reached by unanimous vote of the House of Delegates today at a special meeting in Washington, called for the sole purpose of acting on the proposal, Reorganization Plan No. 1 of 1953. The House acted by approving in full a report presented by the Board of Trustees, which appears on the reverse page of this Special Report. (For details of Plan, See Letter No. 11.)

First speaker was President Eisenhower, who reminded the Delegates that his administration was in philosophic accord with them, then declared: "We thoroughly understand the importance of your functions. . . . We also understand, and are determined to meet the requirements of our population in the services that only you can provide. . . ." He said the medical profession could do its job better "with the co-operation and friendship of the administration," and pledged that his administration wouldn't attempt to direct medical care "or to be the 'Big Poobah.' "

Others who urged the delegates to approve Plan No. 1 included Senator Taft and Rep. Walter Judd; and Drs. Bauer, Henderson, and Murray. Dr. James R. Reuling presided as Speaker of the House. Among arguments made by the speakers were: 1. This is the first plan to recognize medicine at the top level of a proposed Department. 2. Organizationally it is an improvement over FSA in providing for medical programs. 3. It would give the Secretary greater authority in placing new people in policy-making jobs.

SCROLL PRESENTATIONS

Norman F. Miller, M.D., of Ann Arbor, and Frank L. Rector, M.D., of Lansing, were each presented with a scroll by the MSMS during the Michigan Clinical Institute at a luncheon held in the Pan American Room of the Sheraton-Cadillac Hotel, Detroit, March 12, 1953. More than 110 colleagues and friends attended this luncheon.

R. J. Hubbell, M.D., President, MSMS, presided and presented the scroll to Dr. Miller in honor of his unequaled record of a 100 per cent follow-up of the more than 3,150 cases of gynecological cancer seen by him since becoming head of the Department of Obstetrics and Gynecology at the University of Michigan Medical School, July 1, 1931. This record is unique and unequaled in the annals of cancer therapy.

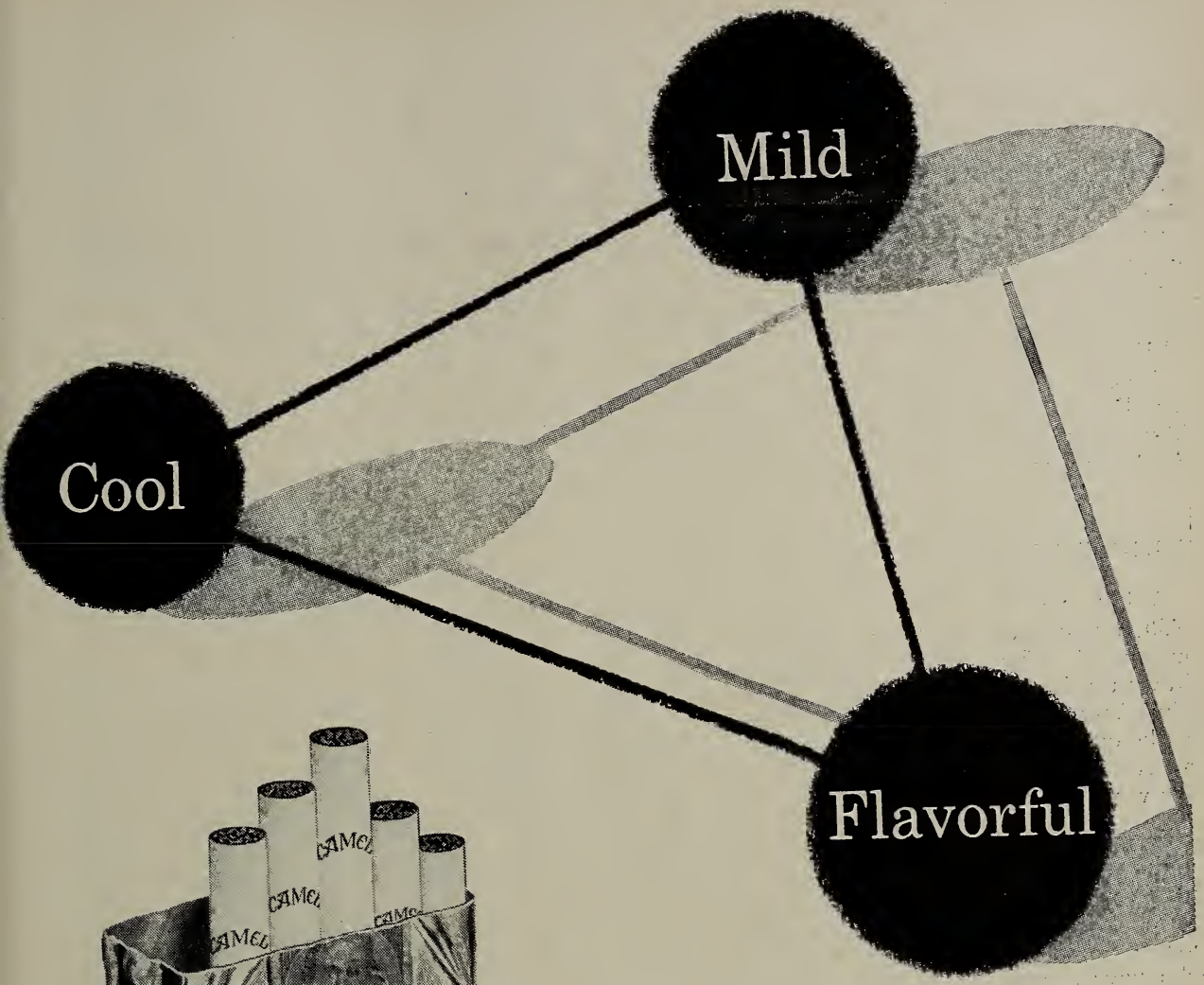
W. A. Hyland, M.D., as Toastmaster, presented the scroll to Dr. Rector in honor of his long service in lay cancer education in Michigan and elsewhere. For more than twenty-two years Dr. Rector has devoted his professional life to cancer education and the improvement of facilities for the diagnosis and treatment of this disease. For five years he was the Cancer Consultant for the Michigan Department of Health and for the past seven years has been Secretary of the Cancer Control Committee, MSMS. He is the author of *The Story of Cancer for High Schools,* recently issued under the auspices of the Cancer Control Committee.

Each scroll presentation was accompanied by a book of congratulatory letters and messages from co-workers and friends throughout the country.

Among those who registered for this luncheon were:

C. E. Badgley, M.D.; R. H. Baker, M.D.; F. W. Bald, M.D.; Otto O. Beck, M.D.; C. J. Berger, M.D.; O. A. Brines, M.D.; Wm. Bromme, M.D.; Max R. Burnell, M.D.; D. C. Burns, M.D.; L. C. Carpenter, M.D.; F. A. Coller, M.D.; R. C. Connelly, M.D.; H. H. Cummings, M.D.; L. E. Daniels, M.D.; H. W. Dargeon, M.D.; M. A. Darling, M.D.; J. S. DeTar, M.D.; R. E. Dustin, M.D.; D. D. Finlayson, M.D.; A. C. Furstenberg, M.D.; E. C. Galsterer, M.D.; C. B. Gardner, M.D.; M. H. Griswold, M.D.; A. B. Gwinn, M.D.; R. L. Haas, M.D.; J. L. Hammond, M.D.; B. M. Harris, M.D.; L. C. Harvie, M.D.; Wilfrid Haughey, M.D.; H. Henderson, M.D.; A. E. Heustis, M.D.; C. P. Hodgkinson, M.D.; E. S. Hoffman, M.D.; R. J. Hubbell, M.D.; A. A. Humphrey, M.D.; W. H. Huron, M.D.; W. A. Hyland, M.D.; S. J. Hyman, M.D.; C. H. Keene, M.D.; H. W. Longyear, M.D.; Bernie Luck, D.D.S.; H. C. Mathews, M.D.; H. F. Mattson, M.D.; A. B. McGraw, M.D.; H. L. Miller, M.D.; R. S. Morrish, M.D.; H. M. Nelson, M.D.; H. A. Ott, M.D.; J. P. Ottaway, M.D.; H. A. Pearse,

(Continued on Page 476)





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(Continued from Page 474)

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Mrs. H. H. Cornelius, Mrs. Marion Heyser, Mr. D. E. Johnson, Mrs. W. G. Mackersie, Mrs. Marie McAra, Mr. W. F. Newhouse, and Mrs. E. C. Witwer.

DOCTOR DRAFT BILL INTRODUCED

A bill extending the Doctor-Draft to July 1, 1955, was introduced in the United States Senate on April 1. The Defense Department which had drawn up the measure, informed Congress that the administration felt that extension "is considered to be the only means" by which the armed forces can get enough doctors to meet the needs for the next two years.

Provisions in the bill include the continuation of the four present priority groups, service credits are given co-belligerents of World War II, the required period of service remains at two years as does the maximum induction age of fifty-one, men who have served less than a year since June 25, 1950, are liable for recall, but those who have served over a year are not liable during the two-year life of this act, and aliens are made subject to service.

MEDICAL MEETINGS AND CLINIC DAYS

A list of known medical meetings and clinic days, sponsored by county medical societies and other physicians' groups in Michigan, follows:

1953

June 1-5 AMA Annual Session — New York

June 2 Annual Clinic Day, Bon Secours Hospital — Detroit

June 19-20 Upper Peninsula Medical Society Annual Meeting — Escanaba

July 30-31 Annual Coller-Penberthy Medical Surgical Conference — Traverse City

Aug. 20 Third Annual Clinic, Central Michigan Committee, ACS Michigan Committee on Trauma, plus Michigan National Guard Medical Personnel, and Michigan Society of North Central Counties — Grayling

Sept. 22 Michigan Chapter, American College of Surgeons — Grand Rapids

Sept. 23-25 MSMS ANNUAL SESSION — Grand Rapids

Oct. 21 Michigan Cancer Conference — East Lansing

Autumn MSMS Postgraduate Extramural Courses — Statewide

Additions to this list of meetings are invited by the Editor of JMSMS, in order to make this monthly announcement complete and accurate.

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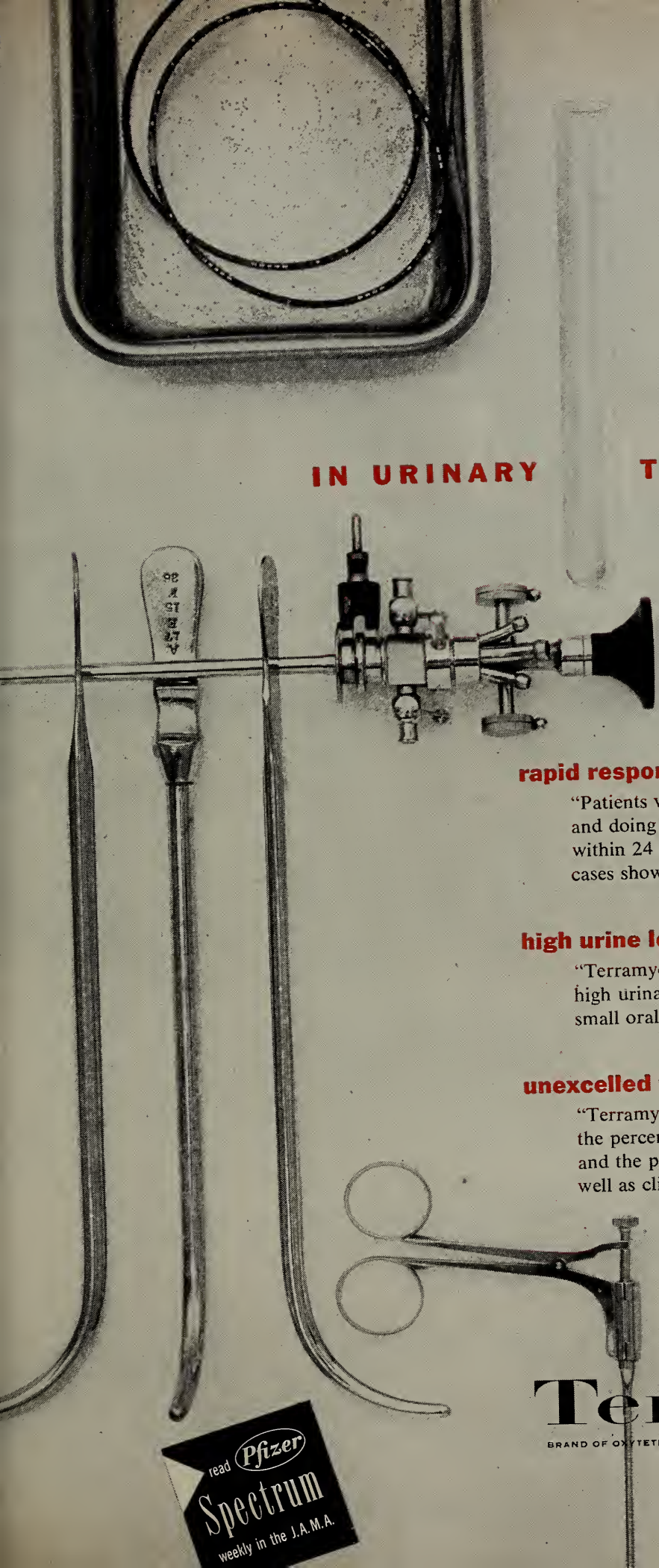
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1. Canad. M. A. J. 66:151 (Feb.) 1952.
2. J. Urol. 67:762 (May) 1952.
3. Ibid. 69:315 (Feb.) 1953.

Terramycin

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M.D.'s, Guests Throng 1953 MCI

Attendance records were broken as doctors of medicine, their wives and guests, exhibitors, medical students and operating room nurses thronged the fourth and fifth floors of the Sheraton-Cadillac Hotel in Detroit during the 1953 Michigan Clinical Institute.

The total registration hit 2,283. It was a marked contrast to the first Michigan Clinical Institute held in Detroit in 1947. On that occasion the attendance was 1,293.

New Features

The three-day scientific program featuring the "block system" of subject matter presentation offered topics of lectures and discussion important to the medical profession. A total of 817 M.D.'s viewed the Davis & Geck motion pictures.

As a new feature this year, the Operating Room Nurses conducted a concurrent meeting with a two-day program of speakers. The meeting filled the English Room to overflowing at all sessions.

Scroll Presentations

In addition to the scientific portion of the MCI, time was set aside to honor deserving members. Five scrolls were presented by MSMS President Reader J. Hubbell, M.D., of Kalamazoo. Recipients of the scrolls were Sherman L. Loupee, M.D., Dowagiac, Michigan's Foremost Family Physician for 1952; Earle A. Irvin, M. D., Detroit, President, Michigan Industrial Medical Association; Harry M. Nelson, M.D., Detroit, President, American Cancer Society; Frank L. Rector, M.D., Lansing, Secretary, MSMS Cancer Control Committee; and Norman F. Miller, M.D., Ann Arbor, University of Michigan.

Publicity

Newspaper coverage of the 1953 MCI reached an all-time high. Newspapers in Detroit and throughout Michigan devoted many columns to the many newsworthy events of the meeting both in advance and during the session.

The outstanding science writers from the three Detroit newspapers covered every highlight of the meeting. A few of the papers also featured picture stories which were given prominent position in all editions.

Incidentally, 2,642 bottles of Coca-Cola were dispensed during the meeting.

Thanks to Convention Workers

The Executive Committee of The Council, Michigan State Medical Society, placed on its minutes at the March 18, 1953 meeting in Detroit a vote of thanks to all persons who helped make the Seventh Annual Michigan Clinical Institute a success. Those deserving special mention are:

Committee on Arrangements and Program—J. Milton Robb, M.D., Detroit, Chairman; W. D. Barrett, M.D., Detroit; R. J. Hubbell, M.D., Kalamazoo; Otto O. Beck, M.D., Birmingham; L. Fernald Foster, M.D., Bay City; E. F. Sladek, M.D., Traverse City; G. C. Penberthy, M.D., Detroit; C. E. Badgley, M.D., Ann Arbor; H. H. Cummings, M.D., Ann Arbor; A. C. Furstenberg, M.D., Ann Arbor; O. T. Mallery, M.D., Ann Arbor; J. M. Sheldon, M.D., Ann Arbor; Harold Henderson, M.D., Detroit; H. A. Howes, M.D., Detroit; W. S. Reveno, M.D., Detroit; J. H. Schlemer, M.D., Detroit; M. G. Becker, M.D., Edmore; W. C. Beets, M.D., Grand Rapids; R. A. Frary, M.D., Monroe; A. B. Gwinn, M.D., Hastings; W. H. Huron, M.D., Iron Mountain; F. E. Luger, M.D., Saginaw; A. E. Heustis, M.D., Lansing; O. D. Stryker, M.D., Mt. Clemens; and E. I. Carr, M.D., Lansing.

Ubiquitous Hosts—W. B. Cooksey, M.D., Detroit; J. G. Bielawski, M.D., Detroit; W. S. Carpenter, M.D., Detroit; R. C. Connelly, M.D., Detroit; Leon DeVel, M.D., Grand Rapids; O. C. Foster, M.D., Detroit; A. E. Heustis, M.D., Lansing; A. A. Humphrey, M.D., Battle Creek; H. Y. Kasabach, M.D., Detroit; E. E. Martmer, M.D., Detroit; H. M. Nelson, M.D., Detroit; G. C. Penberthy, M.D., Detroit; A. H. Price, M.D., Detroit; and A. B. Stearns, M.D., Detroit.

Chairmen of Assemblies—R. A. Frary, M.D., Monroe; A. B. Gwinn, M.D., Hastings; C. H. Keene, M.D., Willow Run; D. A. Cameron, M.D., Detroit; H. L. Smith, M.D., Detroit; and J. D. Littig, M.D., Kalamazoo.

Press Committee—C. L. Weston, M.D., Owosso, Chairman; A. B. Gwinn, M.D., Hastings; H. F. Dibble, M.D., Detroit; and R. A. Johnson, M.D., Detroit.

Richard A. Aubrey, Detroit, who was loaned by the

Attendance Climbs to New High at 1953 MCI

Registration totals for the 1953 Seventh Annual Michigan Clinical Institute in Detroit, March 11-12-13, reached a new peak and smashed all previous records. The total was 2,283—330 more than the 1952 MCI.

The breakdown included:

Doctors of Medicine	1,342
Woman's Auxiliary & Medical Assistants	80
Guests (Including Medical Students)	229
Operating Room Nurses	280
Exhibitors	352
GRAND TOTAL	2,283



Top Left—Confreres of Earle A. Irvin, M.D., Detroit, President of the Industrial Medical Association, congratulate Dr. Irvin during a testimonial dinner held March 10. Dr. Irvin also received a scroll of appreciation for his distinguished service from the Michigan State Medical Society. Pictured left to right are Henry S. Brown, M.D., Medical Director, Michigan Bell Telephone Company; E. C. Holmblad, M.D., Director, Industrial Medical Association, Chicago; Clarence D. Selby, M.D., former Medical Director of General Motors; Dr. Irvin; Otto P. Geier, M.D., Medical Director (retired) of Cincinnati Milling Machine Company; McIver Woody, M.D., Medical Director (retired) Standard Oil Company of New Jersey; A. H. Whitaker, M.D., Detroit.

Top Right—William Bromme, M.D., Detroit, Chairman of The Council of the Michigan State Medical Society, congratulates Dr. Irvin at the testimonial dinner.

Center—Reader J. Hubbell, M.D., Kalamazoo, President, Michigan State Medical Society, presents a scroll of appreciation to Harry M. Nelson, M.D., Detroit, President of the American Cancer Society, during a testimonial dinner held for Dr. Nelson on March 12 at the Michigan Clinical Institute.

Lower Left—Public Health Officers convene at a meeting during the 1953 MCI. Pictured left to right are J. K. Altland, M.D., Lansing; Thomas M. Rivers, M.D., New York City, Director and Physician-In-Chief of The Hospital of the Rockefeller Institute for Medical Research; Albert E. Heustis, M.D., Commissioner, Michigan Department of Health; and Joseph G. Molner, M.D., Health Commissioner of the City of Detroit.

Lower Right—The Woman's Auxiliary to the Michigan State Medical Society conducted their Mid-Year Board Meeting concurrently with the Michigan Clinical Institute. The officers pictured left to right are Mrs. Ross V. Taylor, Jackson, Recording Secretary; Mrs. Walter Stinson, Bay City, President-Elect; Mrs. William Mackersie, Detroit, President; and Mrs. Elmer L. Whitney, Detroit, Parliamentarian.

E. I. du Pont de Nemours & Co., Inc., gave excellent service during the meeting.

Eugene Wiard and Warren F. Tryloff, Lansing, of the Michigan Health Council; Jack Pickering, science writer, *Detroit Times;* Allen Shoenfield, science writer, *Detroit News;* Louis Cook, science writer, *Detroit Free Press;* Bud Mitchell, Radio Station WJR, Detroit; Charles Gunn, Radio Station CKLW, Detroit; and Bud Lanker, WXYZ-TV, Detroit.

Thanks also are extended to the Michigan Medical Service for the "Doodle Diaries" distributed to registrants.

PR REPORT

How the Story of Foremost Family Physicians Is Told

Michigan's Foremost Family Physician is always one of the top news stories of the Michigan State Medical Society.

Recent selectees for that honor—Sherman L. Loupee, M.D., Dowagiac (1952), and Clayton Willison, M.D., Sault Ste. Marie (1951)—have captured the public fancy partly because they are symbolic of that great institution—the Country Doctor.

Michigan's Foremost Family Physician is good public relations. And since the designated M.D. does much for MSMS PR, the work of presenting him to the doctors of medicine and later the public falls upon the MSMS Public Relations Department.

While Dr. Loupee is being accorded the honors he so justly deserves as the 1952 selection, already preparations have been made for the selection of the 1953 Foremost Family Physician.

Preliminary Plans

Early last January mimeographed forms were sent to the Secretary of all component county medical societies of MSMS. These forms—three pages in length—were for nominations by the county societies of a likely prospect for Michigan's Foremost Family Physician.

Once the county society has selected its most outstanding general practitioner the information on the form is filled in concerning the M.D. selection. The information requested is biographical data plus stories and other remarks which best point out why this particular M.D. should be singled out for the honor.

The county society secretaries return the forms with their nominations by June 1.

After the nominations and the forms are received by the MSMS Public Relations Department, they are studied carefully. In nearly every case the selected M.D. has been too modest in answers to the question on the form. The task then is turned over to the MSMS Public Relations Field Secretaries to obtain more information.

The Field Secretaries talk to a number of the doctor's colleagues, friends and relatives. When the information from the interviews is compiled, it presents a true picture of the practitioner.

All information, photographs, newspaper clippings and magazine stories of the doctor are placed in a separate folder and submitted to The Council in September.

Job of Selection

At the first meeting of The Council of the Michigan State Medical Society, held on the Sunday before the opening of the Annual Session, the Council members consider all the entries. While the task is difficult, they finally decide on three M.D.s as logical choices for that year's Foremost Family Physician award.

The information on the three candidates is turned over to the House of Delegates. One M.D. is selected from the three by popular vote.

Newspaper Publicity

As soon as the selection is announced, the newspaper reporters gathered in the Annual Session Press Room clamor for information. If the new Foremost Family Physician is not present, the reporters have to base their stories on the factual information available until the nominee arrives and can give them the colorful material they request.

If, however, the nominee is present, he is immediately subjected to a brief flurry of activity. He is brought to the Press Room for interviews. After the interviews are completed and the photographs taken, he is escorted on a tour by a member of the MSMS Public Relations staff. During the tour he is photographed by a MSMS photographer shaking hands with the officers and other dignitaries of the Medical Society. The pictures are later used in a story in THE JOURNAL.

American Medical Association Award

In October the MSMS PR staff prepares a brochure on Michigan's Foremost Family Physician for submittal for the American Medical Association Award to the Doctor of the Year. This award is made during the December Clinical Session of the AMA.

Dr. Willison was named in the top three for this national award in December 1952. A special news release was prepared and distributed to all Michigan daily and weekly newspapers when this was revealed.

MCI and Scroll

Publicity begins again in February for Michigan's Foremost Family Physician and advance news releases are prepared for the Michigan Clinical Institute in March. One advance release is devoted to the story of the Foremost Family Physician and announces that a scroll of appreciation will be presented to the doctor of medicine at the March meeting.

During the MCI, newspapers carry the story of the scroll presentation. But even here the story of Michigan's Foremost does not end. Once again he is honored and recognized for his achievement when the keynote of the May JOURNAL of the Michigan State Medical Society is Michigan's Foremost Family Physician.

Yet while the current Foremost Family Physician is making his final bow, another is prepared off-stage to make an entrance.



Especially effective against gram-positive organisms resistant to other antibiotics.



Low toxicity; reported side effects infrequent.



Special "high-blood-level" coating.
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INDICATIONS Pharyngitis, tonsillitis, scarlet fever, erysipelas, pneumococcic pneumonia, osteomyelitis, pyoderma. *Also other infections caused by organisms* susceptible to its action, including staphylococci, streptococci and pneumococci.

DOSAGE Total daily dose of 0.8 to 2 Gm., depending on severity of the infection. A total daily dose of 0.6 Gm. is often adequate in the treatment of pneumococcic pneumonia. *For the average adult* the initial dose is 0.2 Gm. to be followed by doses of 0.1 or 0.2 Gm. followed by doses in the same range every four to six hours. *For severely ill patients* doses up to 0.5 Gm. may be repeated at six-hour intervals if necessary. Satisfactory clinical response should appear in 24 to 48 hours if the causative organism is susceptible to ERYTHROCIN. Continue for 48 hours after temperature returns to normal.

Abbott

1. McGuire et al. (1952), J. Antibiotics & Chemo., 2:281, June.
2. Heilman et al. (1952), Proc. Staff Meet. Mayo Clin., 27:385, July 16.
3. Haight and Finland (1952), New Eng. J. Med., 247:227, Aug. 14.

Cancer Comment

THE PATIENT WITH INCURABLE CANCER

Our attention in recent years has been focused on the early detection of cancer as it is possible in many types of malignancy to effect a cure while the lesion is still localized. Unfortunately when cancer is first detected by our present methods it is frequently incurable, and the incurable case presents a prolonged difficult problem for medical treatment. While we must, of necessity, place our emphasis on finding new and better ways of detecting and extirpating cancer, we will continue to have for some time to come the discouraged patient, who, in spite of our best efforts, is slowly dying of his incurable neoplasm.

After the patient has reached the inoperable stage there is still much that can be done to make life endurable and worthwhile. Medical treatment, consisting of appropriate analgesics, palliative x-ray therapy, proper diet, graded exercise, carefully considered transfusions, and specific drugs such as nitrogen mustard or hormonal preparations when indicated, is necessary in almost all cases. Surgical treatment such as the resection of an obstructing lesion of the bowel, removal of the gonads, amputation of an ulcerated, foul-smelling surface tumor, or severing of sensory nerve roots, may in selected cases prolong and improve the patient's life. Psychotherapy for the cancer victim and the family is an essential part of the treatment, and is best carried out by the attending physician in his capable everyday manner, optimistic outlook, willingness to listen to the patient's suggestions and complaints, and consideration for the depleted financial condition which prolonged illness usually produces.

The first suspicion of cancer is often aroused in the office of the family physician. Specialists are consulted for confirmation of the clinical findings, and a biopsy is examined by a pathologist to determine the microscopic characteristics of the suspected growth. If the tumor is within the body a surgeon does an exploratory operation to see if complete removal is feasible. Many of the internal neoplasms are incurable when found and it is at this point that the patient becomes a problem for future treatment and unfortunately, often a neglected problem.

The surgeon returns the case to the practitioner, and the family and possibly the patient is informed that the case is considered hopeless. If the physician has the confidence of the patient and continues with regular calls he can keep the patient in a more cheerful frame of mind. The patient may be able to resume his ordinary work and duties for an appreciable length of time and his final period of enforced inactivity is kept to a minimum by the skillful care of the physician.

If the physician does not show a continued interest in the incurable case, the family and patient will seek further advice. They will quickly become a prey to the prevalent quack cancer cures or will turn to the cultist who for a financial consideration is willing to attempt what the medical profession has so inadequately performed. The result is that the finances are exhausted at a time when care is most needed and the treatment which could have made life endurable has been denied. The one thing that the practitioner or specialist must never do is to intimate that the disease is hopeless and nothing more can be done. The attitude of Pilate is no better today than it was two thousand years ago.

With the many board examinations and the great increase in specialization among the present-day graduates, there is a dearth of physicians who treat the patient as a whole rather than as a not too closely integrated group of diseased parts. The present fashion is to treat the illness and all too often the person is forgotten. Being a specialist does not absolve any physician of the responsibility of the care of the patient as an individual. Not only must the specific illness be dealt with, but the patient must be so encouraged that his attitude toward his disease allows him to make a satisfactory adjustment for his terminal illness.

We are all doomed to die, and dying of cancer need not be worse on the average than death from other causes. There is a marked fear of cancer on the part of the layman that makes the problem of care of the incurable case worse than it need be and presents a real challenge to the conscientious practitioner. The outlook of the patient and family, whether hopeful or depressed, indicates the degree of success achieved by the physician in his overall care of the patient. The great numbers of people seeking the cults and quacks for guaranteed cancer cures is a severe indictment of our present practice of medicine.

While any given case of cancer may be hopeless as far as can be determined, it is not wise to tell the family or the patient that death due to the disease is inevitable. We do better as physicians than as prophets, and the case we doom to die of cancer may be struck by an auto first and be killed, or may prove to be an embarassing error in diagnosis, or finally, by means beyond our knowledge, may simply be arrested.

If at all possible, one physician should assume responsibility for the cancer patient, referring him to other therapists for specialized treatment, but always remaining in the background to offer supportive assistance.

* * *

The physician should maintain a consistent attitude with his cancer patient throughout the course of his illness.



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Editorial Comment

DR. HAWLEY'S CHARGES

THE charges of "unethical practices" leveled against certain elements of the medical profession by Dr. Paul R. Hawley in an interview with the magazine *U. S. News and World Report,* has touched off the anticipated furor in the medical world.

Reputable physicians in Detroit and elsewhere have reacted quickly, some confirming and some taking issue with the allegations. It is impossible, however, to ignore Dr. Hawley's charges. They come from too reputable a source.

Now director of the American College of Surgeons, he had a long and distinguished career in the Army Medical Corps, formerly headed the Blue Cross-Blue Shield health insurance system, and was chief medical director of the Veterans Administration.

Lest anyone interpret Dr. Hawley's criticism as a plug for socialized medicine, let it be recorded here that he is and has been an outspoken foe of that proposal. He expressed his uncompromising opposition to socialized medicine in a speech before the Detroit Economic Club in March, 1949.

Dr. Hawley suggests that doctors themselves can clean up the unethical practices which he defines as unnecessary surgery, fee splitting, ghost surgery and overcharging, but that to do so, they will have to overcome "an occupational reluctance to testify against each other."

Detroit Free Press, February 19, 1953.

REUTHER ADVOCATES HEALTH PLAN

C.I.O. President Walter P. Reuther went all out last week in support of the program offered by Mr. Truman's Commission on the Health Needs of the Nation.

Speaking at the Philip Murray Awards dinner in New York, he called upon President Eisenhower's administration to redeem Republican campaign promises through promotion by the federal government of "a comprehensive health program for all the American people."

Mr. Reuther suggested that the federal government enlist the aid of states and private practitioners and institutions to provide comprehensive medical care, remedial and preventive, for those who could not afford it.

He also declared that C.I.O. unions would seek improved health and social security provisions in all future contract negotiations.

One of the Philip Murray awards was presented to Oscar Ewing for promoting social welfare legislation.—*AMA Secretary's Letter,* Feb. 16, 1953.

MEDICAL DEBT

Radio and television commercials for loan companies stress the opportunity of the listener to obtain a loan quickly and easily to meet a sudden emergency, which is usually a medical or hospital bill. Although medical bills may be the reason frequently given by applicants for loans from the sponsor, it is not true that medical debts constitute an undue proportion of all consumer debt. Consumers are indebted to a variety of lending agencies. Elsewhere in this issue the Bureau of Medical Economic Research has summarized data recently published in the *Federal Reserve Bulletin* and in the press. The conclusion is that medical debt is currently running about 4 to 5 per cent of total consumer debt. Personal consumer expenditures for medical care are also about 4 per cent of total personal consumer expenditures for all commodities and services. The Bureau contrasts its conclusion with the erroneous interpretations of the same data made by a well-known periodical for the laity. The weakness of the report in this periodical is clearly revealed by the Bureau statement and is an example of the problems facing those who are responsible for medical care.—Editorial, JAMA, Jan. 17. 1953.

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General Considerations in Geriatrics

By Frank A. Weiser, M.D.
Detroit, Michigan

STATISTICS relative to aging and the aged, such as will be quoted in this essay, have become commonplace in the past few years—commonplace because the facts of an ever-increasing aging and aged population have become a sudden reality. This is already a problem that is challenging the thinking of statemen, social scientists, industrialists and medical men. The most acutely concerned are the aging ones themselves.

Interest in this vexing problem was first brought to the attention of the public at large by the various pension schemes promoted by the oldsters themselves. Most famous of these was the plan suggested by Dr. Townsend. It was looked upon by the disinterested younger segment of our population and by our uninformed leaders as just another "gimme" scheme, a plot to extract something for nothing by the "havenots."

In 1940, there were 9 million people, in the United States, over the age of sixty-five. They represented 6.7 per cent of the total population. In a short ten years, the number had risen to 12 million (or 8.2 per cent) and 1975 will find 19 million people over the age of sixty-five. They will represent 11.3 per cent of the total population. In other words, in less than two generations the number of the oldsters shall have almost doubled. They shall have increased from one in sixteen of the population in 1940, to one in nine. Verily the avalanche is in motion.

Dr. Weiser is Director of Education and Clinical Research, The Grace Hospital, Detroit, Michigan.

Another facet of the problem is illustrated by the shift in the median age of the population. In 1870, half the population was over 20.2 years old—half under 20.2 years. By 1950, the median age had risen to 30.1 years and in 2000 it will rise to 37.4 years.

These changes are due chiefly to advances in medicine that have brought about a decrease in mortality rates. As a result of the decrease in infant mortality, life expectancy increased quite sharply. Over the centuries from the ancient Roman Era to 1900, there was an increase in life expectancy of only seventeen years, from thirty to forty-eight years; while from 1900 to 1950 there was the phenomenal rise from forty-eight to sixty-nine, an increase of twenty-one years.

Still another facet of this aging population is the disparity between males and females as age progresses. In 1950, between the years of sixty-five to sixty-nine, there were eighty-seven males per 100 females; at seventy to seventy-four there were eighty-eight per 100, and at seventy-five and over, eighty-three per 100. So, as the population gets older it also gets more feminine. Females, under average circumstances, outlive their male components by three to five years. In the upper economic levels they may outlive them seven to ten years. Such a rapidly growing segment of the population creates problems in many fields, all more or less related. For instance, as a voting block the aging might well become a new "minority" group with its own needs impelling it to act as a pressure force to obtain pensions, housing and complete medical care.

In these inflationary days it is not uncommon for people who have spent a lifetime providing for old age to find that rising prices have made it necessary to seek supplementary aid to live—just live. In years gone by when most of the popula-

tion lived in rural communities there was ample room to take care of the comparatively few old people in their own homes. Houses were roomier, food was more available at little or no cost because our ancestors were in the business of growing food for others. The cost of keeping aged members of the family was small. As the population shifted from the rural to the urban areas houses became smaller leaving no place for keeping the elders. The machine age diverted hundreds of thousands from the growing of food to the manufacturing of goods and with it they became dependent on others for maintenance. In addition to having no place to keep the aging, it has become costly to feed them. At the present time, most workers are hard pressed to carry out such a program. They have difficulty providing a secure future for themselves.

The testing time for the theories of those who believe that the human has an intrinsic or instinctive feeling of respect for, and desire to protect, the aged is soon at hand. Investigation of cultures by anthropologists tends to show that evidences of parental respect and care by adults stems from the cultural mores of the community and varies from one civilization to another, and that willingness or unwillingness to desert the aged and ill is probably the result of an environmental or tribal custom phenomenon.

Medical research in recent years has contributed greatly to the creation of this complex problem. The reduction of the death rate in infancy was the first step in raising the longevity of the race. Moreover with the discovery of antibiotics and chemotherapy, a large group of adults will be saved for death at a later day. Now with the passing of medicine from the empiric to the specific stage, as a result of research by men trained in the scientific medicine, many of the so-called degenerative diseases are coming under control to prolong further the life of the individual. Only recently a prominent medical scientist expressed the opinion that we are on the threshold of the control of such diseases as poliomyelitis and cancer. And the research attack on the heart disease, the greatest killer of all, is intensive and world wide. With the growth and further maturing of psychiatry there is hope that more of our most crippling mental diseases will become curable.

The medical profession will have a continuing responsibility in the solution of the care of the aging, even greater than it has had in the past, not only in "doctoring" this newcomer to our civilization but in the actual planning of its total care. Our first and traditional obligation will, of course, be in the immediate ministering to aged sick. It is also our function to help the aging to provide medical care for themselves, and that will be accomplished either by making it possible during the individual's productive period of life to buy prepaid hospital and medical care insurance, or by passing the issue to the government for solution. In spite of our fear of governmental interference with medicine, it is necessary to recognize that a good job probably cannot be done without some co-operation with governmental agencies. And this might indeed be the alternate method, and probably is the intelligent approach to the problem. It might be feasible for the government to so insure voluntary health care plans that after the individual has carried them for a stated number of years, a bank specifically set up for that purpose could then carry the premiums with the insuring company. There need be no interference or dictation.

Our profession will want to co-operate with the social scientists in developing a suitable environment for the oldsters to live in, and with industry that supplies the pensions for those retired from employment, and to help industry determine rules and standards for retirement. The specific task of the medical profession in this multi-faceted cooperative, as has been said above, is the care of the sick. As research in geriatrics progresses, knowledge therefrom will be passed on to the public as it is done at present. Already the family doctor has sensed the importance and immensity of this field. In Detroit for the past two winters a group of general practitioners has devoted many hours to the study of geriatrics. These doctors have learned that care of the aging and aged will involve more than just the care of the physical ailments of the patient. They have learned that there are alterations in the physiological workings of the human body which result in alterations in reaction to disease. And they have learned that along with the normal psychologic changes in aging one has to consider the impact of many things that are the accompaniments of living long: as the loss of life mates, loss of friends and loss of employability. They have learned that the family doctor will again be sought as a friend and counsellor, not alone for his skill as a physician.

The Effect of Longevity on Basic Structures

By Karl L. Swift, M.D.

Detroit, Michigan

IN APPROACHING the subject of the anatomy of aging, Dr. Albert Lansing, Associate Professor of Anatomy of the Washington School of Medicine of St. Louis, Missouri, has stated that "What we don't know about the anatomy of aging would be more in order than what we know about the anatomy of aging." The gross symptoms of aging are very obvious, as you well know. The hair becomes sparse or gray, or both. There are superficial skin changes about the face. The bodily contours change. From these and various signs we can estimate with a reasonable degree of accuracy the age of an individual. The point is that the gross external symptoms of aging are readily determined. However, as soon as the viscera are exposed and examined with the naked eye or with the lens, one suddenly finds that it's most difficult to say this is a senile individual, or a middle-aged individual, or a young man, on the basis of the appearance of the viscera. The viscera, on gross examination, are as well preserved in extreme senility as in early youth, whether the individual be 103 or in his early twenties. Therefore we must resort to microscopic studies and micro-incinerated specimens and the ultra-microscope to really determine the changes in tissue caused by aging.

Aging may be defined as a process of unfavorable progressive change, usually correlated with the passage of time, becoming apparent after maturity and terminating invariably in death of the individual, but from the clinical point of view one almost never encounters aging as a cause of death. No one dies from true aging; he dies of complications which accumulate with advancing years—the so-called degenerative diseases, cardiovascular disease, and so on.

Microscopic studies of the liver, cardiac muscle, spleen, prostate, fallopian tubes, nasal epithelium and skin show progressive, degenerative changes as aging goes on. Liver cells show polypoid nuclei. This is a situation which results from the loss of the ability of the nuclei to divide, but division of chromosomes is sustained. Some cells are doing nothing at all and have become pyknotic. Age pigments have been described in nerve cells, in adrenal gland cells, liver cells and in heart muscle. Without exception, every normal heart after the age of thirty shows varied amounts of this pigment. It may or may not be a true age phenomenon, but it clearly correlates with age. Fibrosis appears to be a fairly general age change, well illustrated by the changes throughout the body wherein elastic tissue is gradually replaced by fibrous tissue.

In a study made by Dr. Lansing of the arteries, longitudinal sections of the aorta were made and studied for atheromatous changes. The degree of atheromatosis was most marked in the lower abdominal portion as compared to the thoracic portion. Also the posterior wall of the aorta shows more changes than the anterior wall. Microincinerated specimens of the human aorta of a senile individual show aggregates of calcium which will go up to 17 or 18 per cent of the dry weight of the tissue. The significance of elastic tissue changes in the development of atheromatosis is illustrated by utilizing the pulmonary artery as a basis for study. The pulmonary is embryologically very much like the aorta. Morphologically it is almost indistinguishable from the aorta. It rarely shows any measure of atheromatosis at any age. In the 1 or 2 per cent of cases which do show atheromatosis in the pulmonary artery, it is usually in an individual who shows pulmonary hypertension, mitral stenosis or a congenital defect, hence we can assume that the higher pressure to which the cerebral, coronary, aortic and other vessels are subjected results in a stress which causes a breakdown of elastic tissue followed by calcification, fibrosis and an affinity for cholesterol.

In summarizing, the iliacs and coronaries show degenerative changes first. The aorta is rather slow as is the hepatic artery. The pulmonary shows minimal changes, while the cerebral artery closely parallels the iliac arteries. It is one of the most vulnerable of all the blood vessels. So much for the anatomical discussion of aging.

Physiologically starting with the eye we find a gradual decrease in the elasticity of the lens and this has been accurately measured in aging man. The diminution in elasticity actually starts in childhood and practically all elasticity is lost before sixty years of age.

Impairment of hearing for high pitched sounds seems to be a normal physiological consequence of aging. The average acuity for hearing high tones —high C on the musical scale and upwards—de-

creases progressively. The higher the tone, the more is the average impairment. Below high C, hearing is nearly as good as with younger people. But for bone conduction of the sound there may be a marked impairment for the lower tones and this may be considered as physiologically normal. The severe impairment of hearing for high tones is said to be due to simple atrophy of the nerve end organs in the basal turn of the cochlea.

In the digestive tract, volume of saliva is less and ptyalin content is diminished. Achlorhydria in the stomach increases with advancing age, other secretions diminish throughout the digestive tract. There is an extension of hair baldness, thinning of skin with smoothness and dystrophy of the toe nails. There is degeneration of elastic tissues and much of the subcutaneous fat disappears. We may mention the heat-regulating function of the skin in connection with physiological changes. The old individual cannot tolerate cold as well as he did when he was younger and may suffer from chilliness. It may not be possible to account for this on the basis of inadequate blood flow. Probably the insulation of the skin is not as efficient because of atrophic changes and the removal of subcutaneous fat. Elderly people tend to suffer more seriously from extreme heat.

Itching skin is a process which accompanies aging which undoubtedly is in some way related to decreased endocrine function. Speed, strength and the ability to sustain moderate effort to exhaustion all increase with age to a maximum in early manhood and womanhood, and then tend to decline.

There have been some very interesting studies on the physiological aspect of diet and life span. In the work of McCay, which was done on rats, it was found that a diet quite adequate with respect to quality but given in such inadequate amounts that the growth of the animal was practically at a standstill, increased significantly the life span of the rat receiving the restricted diet. In the same group receiving the same diet *ad libitum,* the life span was greatly shortened by the excessive eating and the obesity. It seems to be the general thought that over-weight persons, the obese person, may have a shorter life span. As it may be inferred from this that people may eat themselves to an early grave, what might be the answer if we seek a remedy? It seems to be a question of energy metabolism studies. It has been well established that a food intake below energy requirements must of necessity reduce body weight.

In this discussion of the pathology of the aged I have summarized the findings of Monroe of Peter Bent Brigham Hospital who tabulated cases over sixty-one years of age from 1913 to 1943—a total of over 7,900 cases, but all of these were not autopsy protocols; some were clinical records. White and Medalia of Massachusetts General and Boston City Hospitals analyzed 1,251 autopsy protocols. Owen of Grace Hospital, Detroit, has analyzed 246 cases over seventy, since 1946.

The resulting summary of nearly 10,000 cases shows that the major causes of death are as follows in the order given.

1. Cardiovascular Disease.
2. Chronic Vascular Nephritis—(Related to Cardiovascular Disease).
3. Pneumonia—chiefly Bronchial.
4. Cancer.
5. Liver and Gall Bladder Diseases.
6. Tuberculosis.
7. Cerebral Hemorrhage and other Brain diseases.
8. Gastric and Duodenal Ulcers.

Owen has stressed the finding of multiple diverticulosis at autopsy, particularly in the descending and sigmoid colon as a possible clue to the slowing up of digestive and bowel function. An analysis of over 400 diverticuli showed over 309 in the colon.

This survey has brought to light some well known and some rather surprising indications of disease incidence in old persons.

This study indicates the need of further analyses of this sort to establish a firmer foundation for the appraisal of measures for the medical care and the prevention of disease in the increasing number of old persons. Social, economic and educational as well as medical advances are to a certain degree dependent on this increasing knowledge.

The management of the geriatric patient encompasses many factors of which drug therapy is only a part. Proper treatment may eliminate infections, but in other diseases our treatment is supportive rather than curative, and many times only palliative. The reactions to drugs, with few exceptions, is similar in all age groups. In elderly patients, our differences in response to drugs are generally those related to changes in absorption and excretion, renal function, liver function or meta-

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The Proper Examination of an Older Person

By Perry C. Gittins, M.D.
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AN INCREASING number of older persons are receiving treatment for many kinds of illness. There is also an increasing number of aging persons seeking physical examinations. The enlightened public requests this service for the purpose of detecting early signs of disease, and also expects physicians to advise them how they can live longer and happier as they age.

The physician must evaluate all the problems contributing to aging when conducting this examination. We must consider man as a whole unit, his past and present, as well as his future. We must consider the heredity, the family, where he has lived, his social and intellectual accomplishments, marital life, successes and failures, as well as the cumulative effect of diseases which may contribute to lessen his average expectancy.

The family physician has the privilege and satisfaction of examining a family and siblings for two or three generations. His understanding of an older person under such circumstances can be of extreme value.

During the past few months, it was the privilege of a group of family physicians and specialists to study some of the diseases commonly found in elderly patients at the Wayne County General Hospital. Previous to this we had studied the anatomical, physiological, pathological and psychological aspects of aging.* This experience made it possible for us to have a better understanding of what constitutes an examination of an older person.

Anatomical

The anatomical age[1,2] of a person can be roughly determined by outward appearance, the gray hair, changes in the texture of the skin, and by changes in bodily contour. There is a variable difference in the circumferences of the chest and abdomen. We also observe changes in the blood vessels of the eyes. When we look at the extremities, we can see evidence of arteriosclerosis and changes in circulation. These changes occur to a lesser degree in some and more in other people; so we say this man appears to be sixty years old or eighty years old. These are a few of the anatomical changes we observe by simple inspection of the patient. It conveys much more information about the whole person and this concept is fundamental for a good examination.

Physiological

From the physiological standpoint of aging we may observe changes produced by our endocrine glands. The over-activity and the under-activity of the thyroid may contribute to aging. The changes in the function of the gonads at the climacteric of the male and female initiates many of our aging processes. The gradual change in the ability for tissue to repair, the degeneration of elastic tissue and many other physiological changes occur which produce aging without actual disease. We measure some of these physiological changes when we record respiration, pulse and blood pressure, or have an electrocardiogram recorded, following a measured amount of work. The measure of efficiency of the heart, kidneys and pancreas, may give us information of value to the aging person.

Pathological

The pathological age is determined by noting what the cumulative effects a disease or diseases have produced. We may observe a person in his forties affected by a disease, degenerative in nature, which takes years away from this person's natural expectancy.

The early discovery of disease and the removal or the treatment of known disease will break the chain of pathological conditions which will eventuate.

Psychological

Psychological aging occurs in everyone but is variable according to the background of the person, his past interests, successes, his likes and dislikes.

There are various examinations we can conduct to determine psychological changes, but much can be learned as we listen patiently to the way questions are answered. This information is as valuable as the actual finding of a disease, and advice properly interpreted may help the individual pro-

*Directed by Geriatrics Committee of the Wayne County Academy of General Practice.

ceed through life in a satisfactorily adjusted manner.

The History of the Patient

All of the previously mentioned conditions which affect one's aging are constantly kept in mind when we are interviewing an older person.

It is much easier to interrogate the active, alert business man at age forty than it is to question the same person when he is sixty-five or seventy years of age, at which time he may be showing forgetfulness or lengthy explanations of symptoms.

The history can be one of the most important parts of our examination. It requires time, patience and kindness and no display of impatience when we objectively cover the various systems and parts of the body.

We are familiar with some standardized forms, but most physicians individualize their examinations, taking care to record all positive findings of significance in the various systems.

Respiratory.—The cough may be non-productive. Is there pain? What makes it worse?

Cardiovascular.—The patient may complain of increased pain on exertion, shortness of breath, fast pulse, swelling of extremities, increased frequency of passing urine, especially at night.

Gastrointestinal.—Loss of appetite, change of bowel habits, jaundice, pain after eating, emesis of blood, black stools, et cetera, are complaints pointing to disease in this area.

Genitourinary.—Nocturia, frequency, blood in the urine and obstruction to urinary stream may be mentioned. The female may have these complaints as well as vaginal bleeding.

Musculo-skeletal.—Complaints of joint and back pains, muscle weakness are commonly associated with arthritis and decalcification of bone.

Nervous System.—We observe character of speech, memory, hearing, vision. We note sense of balance. He may complain of pain, numbness and headache. We observe for neurotic tendencies and evidences of psychiatric changes.

Family History.—Inquire all about diseases of a familial nature, such as tuberculosis, allergy and diabetes. Also family longevity must be included.

Past Medical History.—Reports of past medical illnesses should not prevent us from searching even though there is a history of a previous examination.

Social History.—The aging person may have habits of work, sleep, eating, drinking or smoking which may be important. The financial status, home life, marital happiness, his fears and desires may have an important relationship to the development of neurosis.

The Physical Examination

If pressed for time, defer the physical examination so that it may be done at a more suitable hour.

The weight, height, temperature, pulse and blood pressure are recorded. We then systematically check the various areas of the body. The skin is examined for pigment, skin tumor and other signs of disease. Examine the neck, axilla and groin for evidence of lymph node enlargements. Look for breast changes. Look for diseases of chest and heart. The abdomen is checked for tumor of viscera, fluid, scars and hernia. A rectal examination is done in both the male and female, and, if indicated, a proctoscopic and sigmoidoscopic examination should be done, especially if there is evidence of blood in the stool.

The female patient should have a pelvic examination and special consideration given to suspicious cervicitis or irregular bleeding.

The extremities should be checked for varicosities, circulatory changes and changes in the reflexes.

Whenever there is any suspicion of early visual changes, an ophthalmoscopic examination must be done. Early changes in hearing may be determined by the use of the audiometer.

The urinalysis and blood count are usually a routine procedure.

Other specialized examinations such as electrocardiogram, x-ray, blood chemistry, et cetera, should be used whenever indicated.

After this is done we should carefully summarize our findings. We may find little or no evidence of disease. If so there may be something in the social life or his habits of work, eating, recreation that may contribute to early aging.

We may find some early signs of hypertension, weight gain, gallbladder disease, sinusitis, prostatitis and many other conditions to which definite treatment may be directed in order to prevent pathological aging processes.

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Treatment of the Elderly Patient

By A. Hazen Price, M.D.
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THE SATISFACTORY treatment of the elderly patient differs from that of the younger person mainly in that it requires much more patience on the part of the physician. He must be willing to listen not only to specific complaints, but also to many apparently irrelevant facts which the patient wants to talk about. If he gives the impression that he is in a hurry, it is apt to be inpreted that he is only superficially interested, and has no time for someone who is old and probably afflicted with some condition for which nothing can be done anyway. Confidence and hope can only be instilled into the patient by a sympathetic understanding of his whole problem, and the development in his mind of a feeling that he has in the physician someone who truly has his interest at heart. When this relationship exists the mere presence of the doctor gives a lift which cannot be duplicated in any other way.

When the older person becomes ill, he is apt to develop a subconscious anxiety about his future. He realizes full well that he has already lived more than half of his life, but he wants to live a few more years to do some of the things he has not had time to do. He wonders whether he will be so incapacitated as to not be able to live as he had previously. Reasonable assurance on the part of the physician to the point of being overly optimistic at times, and even at the expense of being wrong, adds much to the patient's incentive to get well. Emphasis on the good features of his condition gives added encouragement. A worthwhile hope can be given in most illnesses; few are totally hopeless. To youth and middle age the afflictions of the old often appear intolerable enough, to dampen all desire for life, but the truth is "no man loves life like him thats growing old."

It becomes apparent, therefore, that the treatment of the senior members of our society involves much more than the simple prescription of phenobarbital, digitalis or morphine. It entails a careful survey of the over-all problems of these patients. Their worries and anxieties about business, economic insecurity or perhaps about the way their son or daughter has been treating them, all play an important part in disturbing their peace of mind. While emotionally upset they cannot sleep restfully, their digestion is apt to be impaired, their appetite poor, and the attacks of angina are more frequent and severe. Indeed symptoms such as headaches are more often due to environmental stress than to organic changes, and the removal of the stress relieves the symptom. Confusion of variable degree is frequently seen when older people are removed from familiar surroundings, and it is important to recognize this in order that sympathy and reassurance be used instead of sedatives which may only add to the confusion.

The above aspects of the care of any patient represents those phases of the problem which deal with the person who has the illness. Not infrequently this personality evaluation is overlooked in our efforts to adequately treat the specific disease, with the result that the patient fails to show satisfactory progress until his emotional difficulties are understood. This is particularly true of the elderly patient.

While the psychologic management of these patients is of primary importance there are many other general measures which should be kept in mind. Careful attention to many small details in addition to treating the presenting illness adds much to the well-being of the patient. Indeed his comfort should take precedence over all other factors, and everyone concerned, doctors, nurses and relatives, must be made to realize this fact.

If he is in a hospital someone the patient knows should be permitted to stay with him as much as possible. Most older people would rather stay home, and do not adjust themselves well to hospital routine. The bed should be lowered so that he is less apt to fall when getting in and out of bed. A commode alongside of the bed will permit a much easier bowel movement, than trying to use the bed pan. I can think of no condition other than a hip or spinal fracture in which this is not preferable. It is much better that the patient be out of bed several times a day, not only sitting in the chair, but walking about the room. This induces deeper breathing and exercise of the legs which is so important in the prevention of pulmonary and venous stasis. Deep breathing and leg

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exercises in bed should be encouraged if the patient's condition does not permit him being up. Special attention must be given to the back in the prevention of bed sores. Frequent inspection of the sheets should be made for crinkling and dampness, and the back carefully rubbed with alcohol and powdered night and morning. This is a nursing function, but unfortunately some nurses do not function well and need reminding.

A word of caution regarding too extensive and exhausting examinations of these patients is worth while. Meddlesome diagnostic procedures in the elderly should be avoided. The hospital stay should be short and only those studies made which will offer real help in treatment. A patient of seventy-five years of age with arteriosclerotic heart disease and a mass in his chest which is probably an inoperable malignancy will not be helped by a positive diagnosis made through bronchoscopic examination. The only people helped by establishing this with certainty are the doctor and the relatives.

Constipation in the sick person must be recognized and treated before impaction develops. The regularity of habit at stool must be emphasized and can be accomplished most often by proper diet and insistance upon a bowel movement at some specific time each day by the initiating effect of a glycerin suppository or small enema. Cascara and (or) mineral oil at bedtime may also be necessary. A fecal impaction can be extremely uncomfortable and when manual removal is necessary it may prove to be a severe ordeal in the seriously sick.

The treatment of specific systemic disease in the elderly is very little different from the same condition in the younger person, except that certain modifications are necessary depending upon the reactions of the patient, and the degree of hope for relief that can be expected.

A failing heart needs digitalis most often, but the dosage required in the older person is usually less. Not infrequently digitalis causes mental confusion, and this should be thought of when the patient becomes disoriented. Low salt diets are often so unpalatable that the patients will not eat, and in this case the resins are of great help in eliminating salt from the food. The mercurial and theophylline diuretics are likewise a great adjunct in eliminating fluids. The possibility of a hidden thyrotoxicosis in every case of chronic heart disease should be kept in mind even though none of the cardinal signs are present. The therapeutic trial of iodine will oftentimes be diagnostic, and if so the use of radio-active iodine may change the outlook completely. In fact, the use of this form of treatment even if hyperthyroidism is not present has proven of great value in some cases of chronic valvular or non-valvular heart disease.

The relief of angina is afforded in the usual way by nitroglycerin, and other vasodilators. Should the frequent coronary spasm result in thrombosis the symptoms are apt to be much less severe than in the younger person, and what appears to be a minor thrombosis may result fatally when least expected. It is doubtful whether anything is gained by hospitalization of the older person with coronary thrombosis. They are usually much happier if cared for at home.

The hearts of many old people are far from normal, yet quite good enough for the work required of them. When preparing old patients for operation, it is quite common to find more abnormalities than is the case in younger people, but they are frequently of less serious prognostic significance than in youth. No one should be denied the benefits of modern surgery on the basis of age alone if it will add to the patient's comfort. I am thinking particularly of prostatic, gynecologic and ophthalmic abnormalities which frequently create serious handicaps in everyday living. Added care must of course be used preoperatively and postoperatively, particularly with respect to nutrition and fluid balance, but each person is a special problem and must be evaluated individually. Digitalization before operation is indicated only if any signs of failure are evident. If given empirically, it may only create nausea and mental confusion in an otherwise good risk patient. Ambulation before and after surgery is a must, thereby encouraging deep breathing and the prevention of pulmonary stasis and atelectasis with its attendant serious results.

Peripheral vascular disease is present to a variable degree in the older age group and must always be given special consideration. Avoidance of extremes of heat and cold should be urged, as well as tight garters, stockings, and shoes. Meticulous care of the skin of the feet with careful drying after bathing and the application of lanolin to avoid drying and cracking will oftentimes prevent unnecessary infections. Should gangrene of the toes develop, conservative measures are best used as long as possible. It is surprising what can be

accomplished with Buerger's exercises or the oscillating bed, and the avoidance of moist compresses and artificial heat. The latter may be helpful if used for only very short periods in the presence of infection. Maceration of tissue will surely result if not carefully watched. If amputation becomes necessary, it should be done high enough to assure as good a circulation as possible. Modern anesthesia for surgery eliminates most of the risk of shock.

Pulmonary diseases are frequent in this age group because of poor pulmonary circulation and the habit of shallow breathing. Chronic asthmatic bronchitis with the resultant disabling emphysema due to loss of elastic tissue in the alveoli and bronchi is perhaps the most common and most difficult to control. Symptomatic relief can be afforded by a variety of drugs—aminophyllin, ephedrine, and the iodides, together with the antibiotics when acute infection supervenes. In the chronic purulent infections, they are also helpful and in conjunction with the sulphonamides. Education of the patient in how to breathe with his abdominal muscles has proven of tremendous help in many of these cases. W. A. Allen of Baltimore has devised an ingenious set of exercises which are of great aid in minimizing the incapacitating dyspnea of these patients.

Tuberculous infection in these patients is more common than often suspected and should be looked for in every case.

In the elderly patient, thyroid insufficiency is a part of the aging process, but if it is extreme, much of the lethargy and intolerance to cold can be greatly improved with even small doses of thyroid extract. Obesity is mentioned at this time in order to emphasize again that thyroid extract should never be used to reduce weight unless there is an associated hypothyroidism. Overweight must be controlled in the satisfactory treatment of heart disease, arthritis, and diabetes, but only by dietary restriction. Moderate activity, while very desirable in a general way, may seriously aggravate many conditions and should not be advised for weight reduction. Some of the weakness and poor muscle tone of these patients can often be helped by estrogenic or androgenic therapy in carefully controlled dosage.

There are still many phases of specific treatment in the elderly patient which have not been mentioned in the above paragraphs. Space does not permit a complete discussion of all of these. The physician must be guided in the treatment of older patients by the individual needs at the time of the illness, and by the general observation that these patients require less medication and more assurance. They do not tolerate drugs as well as the younger person, especially all types of sedation, barbiturates and morphine in particular. Chloral hydrate or whiskey have a more quieting effect, with less likelihood of side effects.

In conclusion, it should be said that the physician must recognize his responsibility in giving these patients adequate care at all times, being careful not only of what he tells the sick individual, but also how he tells it. Sending the patient home with the diagnosis of "hardening of the arteries" and a prescription for phenobarbital is very poor medicine. We owe these patients much better care.

THE EFFECT OF LONGEVITY ON BASIC STRUCTURES

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bolic rate which may alter the rate of destruction of the compound and thereby influence toxicity. In general, habits good, bad or indifferent are acquired and fixed by repetition over a period of time and habits of thinking, eating, smoking, sleeping, exercise, et cetera, become fixed in the aged. It is important not to insist upon abrupt changes in the habits of such patients and to never impose restrictions which have not been tried and proven absolutely positive. They may be modified slowly but if advice regarding habits is too restrictive, the patient will not follow the therapeutic suggestions and nothing whatever is accomplished.

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Arthritis and Geriatrics

By J. J. Lightbody, M.D.
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AS THE HUMAN body ages, it proceeds to show objective and subjective signs of deterioration in a variety of ways, but many of the physical complaints of elderly patients are associated with derangement of the musculoskeletal system.

We don't hear the old-fashioned term "lumbago" being used much in medical circles at the present time, not because there are not as many backaches as there used to be, but because of the introduction of new terminologies which have gradually crept into the medical nomenclature. The fact is that through the years we have discovered specific causes for many of the old lumbago pains, and they are now referred to as myositis, fibrositis, radiculitis, arthritis, ruptured disks, et cetera.

As the elderly person approaches that period of life in which he finds his physical energy decreasing and that many of his primary interests in life are waning, he actually begins to lose height and appears shorter as he grows older. The main reason for this is faulty posture which causes the knees to sag a little, the shoulders to stoop a little, the chest to flatten a little, the stomach to protrude a little, and the gait to slow down a little. This characteristic deterioration of posture in the elderly person is very often the cause of many of the aches and pains in the back, neck, and feet of these individuals. Frequently the correction of faulty posture will greatly improve the appearance of the person and make him appear to be much younger and, coincidentally, will alleviate much of the physical discomfort associated with postural defects.

Osteoarthritis

The most common type of specific joint difficulty in the older age group is osteoarthritis, this term actually being a misnomer as it is not an infectious disease but only an aging of the involved joints—a deterioration due to advancing age.

The most common area involved is the spine, particularly the cervical and lumbosacral regions. Cervical osteoarthritis may be the cause of severe basal headaches or severe radicular pains in the neck and shoulders.

The discomfort experienced by the patient does not always parallel the amount of osteoarthritis as seen by x-ray. Frequently, the x-ray shows advanced osteoarthritis, but the patient may have very little pain, and occasionally the patient may have severe pain but the x-ray shows only minimal changes. Ruptured cervical disks are occasionally missed in this group, and this diagnosis should be considered in any severe, protracted, radiating neck pains.

Many of the older group with cervical arthritis gradually develop an anterior angulation of the head on the neck because they continue to use too many pillows under the head at night. Being in bed seven to nine hours daily with the head in a flexed position, the patient will experience considerable discomfort, particularly in the morning, trying to get the head back to a normal, comfortable position. These patients should learn to sleep without pillows or perhaps with a very small pillow so that the cervical and thoracic spine are in approximately equal horizontal positions. Hard mattresses or the use of bed boards under a mattress are considered valuable adjuncts in the treatment of osteoarthritis of the spine. Osteoarthritis of the shoulder is another common cause of disability in this group, and at times is associated with a bursitis of the shoulder.

Bursitis of Shoulder

Subacromial bursitis seems to be increasing in incidence and is one of the most difficult conditions to manage from a clinical standpoint because some cases are very resistant to all types of treatments.

Bursitis of the shoulder usually involves the supraspinatus tendon which frequently becomes involved in calcific deposits in the subacromial area. The amount of calcium as seen by x-ray gives no indication of the severity of the pain as many cases with large calcium deposits have no pain or very little, while others with no calcium or perhaps small flecks present have excruciating pain and tenderness and marked limitation of the shoulder joint.

There are a number of accepted methods of treatment of bursitis, depending occasionally on

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which specialty is taking care of the patient, but more commonly on the length of time and severity of the presenting symptoms plus the presence or absence of calcium as seen by x-ray. Deep x-ray therapy during the acute stage is being used more or less routinely in early cases, and the roentgenologists report considerable success with this type of therapy—although a rather large percentage seem to require several series of this type of treatment. Calcium has been known to disappear from the bursa under treatment with deep x-ray.

Older people are prone to immobilize themselves without much provocation as far as pain is concerned, and, if they do not move the arm and shoulder, this will prolong the convalescence from the bursitis. Manipulation with or without anesthesia is occasionally used by orthopedic surgeons, and this, also, has given good results. Local injection of the bursa with procaine or hydrocortone to stop the acute pain or to attempt to wash out the calcium is occasionally indicated. Physical therapy, particularly hot wet packs, with massage of the shoulder girdle muscles and forearm, and with passive motion of the shoulder, should be maintained as part of a complete program in the treatment of bursitis. If the arm and shoulder on the affected side are immobilized with a sling for too long a period of time, the bones will begin to show disuse osteoporosis, and the muscles of the shoulder and arm will begin to weaken and show evidence of atrophy. Early movement of the extremity is essential.

Osteoarthritis of Hips

Osteoarthritis of the hips, particularly the advanced type of cases (coxae malum senilis), is one of the most disturbing conditions observed in elderly patients because it involves weight-bearing joints, and when the process reaches a state so that the person is unable to move without severe pain, then the problems associated with the general care of this person are increased tremendously. There is a great amount of evidence to show that this common condition of deterioration of the hip is associated with a lack of blood supply to the hip joint—so everything that would tend to improve the local vascular supply would be of some benefit. Orthopedic surgery to the hip with the use of a vitallium cap and hip arthroplasty is getting to be a more common corrective procedure and has prevented many older people from becoming permanent invalids.

Osteoarthritis of Lower Spine

Osteoarthritis of the lower spine, associated with a variety of muscular aches and pains, is very common in the elderly person, and about the only treatment indicated is the use of a variety of heat applications with massage. Ruptured lumbar or lumbosacral disks are often overlooked in the presence of low spinal arthritis, and if the clinical picture of a ruptured disk is clear-cut and the myelographic x-ray definitely localizes the lesion, then surgery is indicated—otherwise conservative treatment with physical therapy, rest, and sedation is preferable.

Osteoarthritis of the knees is a common condition found in the elderly patient and is often associated with sterile effusions into the joint or bursae. Conservative treatment with moderate rest and frequent physical therapy usually takes care of these patients, although corrective orthopedic surgery procedures such as synovectomy are occasionally indicated.

Rheumatoid Arthritis

Rheumatoid Arthritis usually begins in the age period of 20-45, but as these people continue to live into the older age group they may often develop signs of a concomitant osteoarthritis—particularly associated with Heberdens nodes in the terminal interphalangeal joints of the fingers. By the time the rheumatoid arthritic reaches fifty-five or sixty, they have usually reached a "burned-out" stage of the disease and their degree of disability has already been established. Occasionally a true rheumatoid arthritis is observed to begin in older people and may run a rapid clinical course.

The indications and contraindications for the use of ACTH and Cortisone in rheumatoid arthritis in the aged is somewhat different than the standards or criteria for administration of these drugs in the younger person. A large percentage of the elderly patients have some degree of generalized arteriosclerosis with a predominance of nephrosclerosis, cerebral vascular sclerosis, and coronary insufficiency, so that the two controversial hormones, ACTH and Cortisone, should not be used except in acute or rapidly disabling rheumatoid cases and only then to be used for short periods of time to get the patient "over the hump" as far as his disability is concerned.

Gout

Gout is still with us but much of it is passing by unrecognized. Part of this difficulty is due

to considerable confusion regarding specific x-ray appearance of gout as it often resembles advanced rheumatoid arthritis. "Punched out" areas that are supposed to be diagnostic of gout are also observed in rheumatoid arthritis. The blood uric acid in gout is elevated in only about 50 per cent of the cases so that the diagnosis is made more on the clinical history of sudden onset of an acutely painful swelling in or around a joint—most often involving the large toe. Ninety-eight per cent of all cases of gout are supposed to be found in males, but modern statistics show that gout in the female is increasing. Tophi are not usually seen until rather late in the disease and occur in only a relatively small percentage of cases.

The treatment of choice in gout is still the old standby drug, Colchicine, occasionally combined with the use of ACTH; the latter hormone being used for a couple of days followed by Colchicine over a long period of time. Butazolidin, a derivative of amino-pyrine, is reported to give excellent results in acute and subacute gout and may even replace Colchicine as the drug of choice in the future. Low caloric and low purine diets are advised during all stages of gout. Benamid is a relatively new drug that is being used successfully in chronic gout. Salicylates are often used in conjunction with Colchicine to stimulate excretion of urates. Physical therapy seems to accentuate the painful symptoms during the acute phase but is helpful when applied to the muscles and tendons above or below the involved joint during the convalescent stage.

Collagen Diseases

In any prolonged illness in elderly persons associated with musculoskeletal difficulties the possibility of one of the collagen diseases being present should be seriously considered. A number of cases of disseminated lupus erythematosus have been picked up because the physician was suspicious of a collagen disease and specific laboratory tests for the lupus erythematosus cell were obtained.

Rheumatic fever is not common in the elderly patient. Scleroderma, periarteritis nodosa and dermatomyositis are occasionally observed in older people and the best clinical means of objective identification of the presence of these diseases is by doing skin or muscle biopsies in questionable cases. Occasionally sarcoidosis is associated with peripheral joint conditions.

Complete Physical Examination

Complete routine physical examination is just as essential in the elderly patient to determine the cause of joint difficulties as it is in the younger group, and the usual laboratory aides to confirm or rule out diseases should be done. In the older person because of the greater frequency of malignancies in the gastrointestinal and genitourinary tract, and in the thyroid and breast, there is always the possibility of bone metastases which may be a primary cause of musculoskeletal pain. Occasionally malignancy is unsuspected until a person is under observation for arthritis, and in a routine x-ray of the spine, shoulders or hips, the evidence of bone metastases is already observed. This factor is particularly noticeable in dealing with severe shoulder pain so that x-rays taken for bursitis of the shoulder or for arthritis of the shoulder should include at least a portion of the upper half of the lung on the offending side, as occasionally a malignancy of the lung is the cause of severe intractable painful shoulder.

Climatotherapy

The elderly person with any type of arthritis or allied diseases seems to improve quicker and feels better in a warm, dry climate where there is a minimum of swings of barometric pressure with a relatively low humidity. Practically all elderly people have some evidence of peripheral vascular deficiency, and this, when combined with rheumatism of any of the weightbearing joints, makes it very difficult for the older person to move around. These people seem to have their greatest difficulty in the morning when they try to get out of bed, at which time they experience generalized muscular and joint stiffness; but after they have been up and walking around for an hour or more they feel much better—probably from the stimulated increase in circulation. If it is at all possible, the elderly person with any chronic joint or muscle disability should spend as much time as possible in a warm, dry climate.

Many elderly patients with rheumatic conditions have varying degrees of anemia and subclinical vitamin deficiency, most of which are due to improper nutrition. When the blood counts are brought up to a higher than average level and the vitamin deficiences are corrected, many of the aches and pains due to fatigue in this group will be lessened.

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Hospital Care for the Chronically Ill

By Roland M. Athay, M.D.
Eloise, Michigan

AUTHORS of textbooks on geriatrics are careful to point out that geriatrics is a study of the biology of the aging process and is not solely concerned with medical treatment of patients in the older age group. From the standpoint, however, of the physician and of the patient, this medical treatment assumes major importance, and medical care naturally involves hospitalization for a large proportion of the patients treated. The problem encountered by patients in the older age group, seeking suitable hospital accommodations, differs from that of other segments of the population only when it involves a long-term stay for chronic disease or disability. It is, then, the same problem which confronts all persons with chronic disease or disability for whom home care is inadequate or unavailable.

At present there are only two general types of facilities providing for the long-term patient; one is the tax-supported—generally county—hospital or infirmary; the other is the group of privately owned and privately operated nursing homes, convalescent homes, et cetera.

The public hospital facilities are available in relatively few counties, and the type of care provided varies greatly. In addition, it is available only to the indigent or medically indigent person. While chronic disease is frequently a cause of medical indigency, the two are by no means always found together; and the benefits now being paid on the basis of age, chronic disability, and from various forms of insurance have made a large additional number of citizens ineligible for care in tax-supported institutions.

The facilities provided by the group of privately owned and operated nursing homes, convalescent homes, et cetera, are meeting some of the needs with varying degrees of success. In general, they provide only custodial care, and in many the cost is prohibitive to most patients and patients' families. Their primary deficiency is the almost complete lack of provision for medical care. There is, therefore, a great need in almost every community for a proper and adequate facility for the long-term hospital patient.

Practically the only solution for this problem, which has been recommended, is the establishment of independent "chronic hospitals." In the writer's opinion, the establishment of such "chronic hospitals" would be a serious mistake and would be a backward step in any sound hospital program. It has for some time seemed to be generally agreed that specialty hospitals have proven inadequate and undesirable because of the inability of hospitals so equipped and so staffed to provide all of the diagnostic and therapeutic resources necessary for the treatment of a single disease process, to say nothing of their inability to provide adequate facilities for any other disease process certain to occur during the period of any long-term hospitalization. If, then, there is a definite need to improve and expand the provisions already in existence for the in-patient care of the chronically ill, and if the concept of the separate or independent "chronic hospital" is to be rejected as unsuitable, what can be proposed to provide the needed facility properly?

Fortunately, we do not have to speculate. This has already been done in several public or tax-supported hospitals by creating within the hospital separate facilities with segregated costs, and by transferring patients from one cost center to another as the need for diagnostic and/or therapeutic procedures indicates. Under this system, the patient remains in the lowest cost center appropriate to his needs except when receiving special services, and his hospital cost is, therefore, kept at a minimum. To illustrate, at the Wayne County General Hospital there are eight cost centers as follows: Ambulatory Indigent; Infirmary Bed Patient, chronic; Out-Patient Department; General Hospital, chronic; Psychiatric, regular; Psychiatric, tuberculosis; General Hospital, tuberculosis; General Hospital, acute. In this and similar hospitals the patient's record is continuous, and his total treatment co-ordinated. Most important, however, is the fact that patients are not admitted to chronic hospital centers except through the acute hospital center, and then only after it has been determined that further treatment can be carried out in the center to which he is to be transferred. This system evolved from necessity, it having been determined by experience that it was impossible to provide proper patient care in a chronic hospital,

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either for physical or mental illness, without the provision of an acute hospital facility. The number of patients who seek admission to these chronic hospital centers on the basis of availability of acute hospital services, which they have been unable to find in other chronic hospital facilities, is significant.

To provide an equally satisfactory program for the long-term patient, not eligible for admission to a tax-supported hospital, it is proposed that the voluntary or privately operated hospital establish a similar pattern by adding to its already existing, excellent acute hospital facility two cost centers, one for the long-term chronic patient and one for the patient requiring purely custodial care. The hospital organization would thus be divided into four cost centers with functions as indicated.

Cost Center No. 1.—Out-Patient Department

Functions:

A. Present out-patient services

B. Post-hospitalization services

C. Pre-hospitalization services preliminary to admission to any one of the other three cost centers, if necessary.

Cost Center No. 2.—Acute Hospital

Functions:

In-patient service for all patients requiring the equipment and staff facilities provided by a short-term hospital regardless of the acute or chronic nature of the illness.

Cost Center No. 3.—Chronic Hospital

Functions:

Bed or bed and ambulatory care for patients requiring a minimum of nursing and medical care, with added emphasis on recreational, occupational, and rehabilitation services and procedures.

Cost Center No. 4.—Custodial Hospital

Functions:

Bed care for patients unable to provide necessary nursing care in a home situation.

These cost centers could be provided either in the same physical plant or in separate pavilions or buildings. It would seem obvious that such a coordinated program of patient care, with uninterrupted professional supervision, would be the lowest cost and most adequate method of providing total hospital services.

It is not anticipated that voluntary hospitals will be particularly interested in expanding or modifying their facilities and organizations in this way, being traditionally concerned with providing only so-called acute or short-term care. In spite, however, of the attempt of all voluntary hospitals to limit their facilities to short-term care, there are undoubtedly at all times patients in such hospitals receiving care which could properly be given in what I have indicated as Cost Centers No. 3 and No. 4. The establishing of such cost centers, and the transferring of these patients to them would be of great financial advantage to the patients or to insurance carriers, and would release much needed bed space for other patients.

At the present time public hospitals are being pressed to expand in order to provide needed services for the population, even for financially ineligible patients; and small private facilities, with inadequate provision for total care, are increasing in number and are attempting to cover a larger portion of their patients' total needs. Unless private or voluntary hospitals enlarge or modify their facilities and adapt their organizations to provide care for the long-term patient in some such manner as outlined above, they will fail to fulfill their obligation to the community from which they derive their support and will fail to keep hospital care in the hands of those best able by training and experience to provide it, and on its traditionally independent basis.

WAYS TO HEALTHIER AND HAPPIER OLD AGE SOUGHT

Ways to more fun for old people as well as better health, jobs and fewer economic problems will be sought in a new broad program to be started soon at the Harvard School of Public Health with the aid of a $112,688 three-year grant from the W. K. Kellogg Foundation of Battle Creek, Mich.

Because the Harvard School of Public Health feels that there are important relationships between all of the forces which affect the lives of the aged, it welcomes the opportunity to help pioneer an approach to the problems of old age that takes into consideration all of the social, economic and health factors with which the older person must contend, Brig. Gen. James Stevens Simmons, U.S.A. (ret.), dean, said in announcing the new program.—*Science News Letter,* March 28, 1953.

Some of the Problems Encountered in Setting Up a Rehabilitation Center

By Frederick C. Swartz, M.D.
Lansing, Michigan

A FUNCTIONAL PLAN for the establishment of a community rehabilitation service and center was presented in 1946 by The Baruch Committee on Physical Medicine. This is an excellent guide and should be studied by all interested in setting up such a center. In the application of such a plan to any local situation, however, many problems arise. It was thought that discussion of these problems might prove interesting.

In Ingham County, as elsewhere, interest in rehabilitation was stimulated greatly in the years immediately following World War II. Several members of the Geriatric Committee of Ingham County Medical Society became so vocal that this problem became the main interest of the committee. Books and pamphlets on the subject were accumulated and several members of the committee paid extended visits to a number of the more prominent rehabilitation centers. One of the recommendations of the Fourth Annual Conference on Aging held at the University of Michigan was that there should be a center in each county for the dissemination of knowledge about the techniques of rehabilitation and that in most cases this could well be in the county hospital. As a result of the accumulation of the above materials and ideas, and after much discussion it was agreed that the goal of a rehabilitation center was not only "To achieve the maximal function and adjustment of the individual and to prepare him physically, mentally, socially and vocationally for the fullest possible life compatible with his abilities and disabilities" (The Baruch Committee on Physical Medicine) but also to spread the philosophy of the modern concepts of rehabilitation to the Medical Profession and allied interested group and to teach the techniques of rehabilitation to the administrators of acute and convalescent hospitals and to the relatives who are caring for the handicapped in the private home.

The above conclusions were then presented to the Director of Social Welfare for the County, The County Board of Social Welfare, The County Board of Supervisors and the Physician of the County Hospital. All agreed that the idea had merit and we were encouraged to proceed.

It was evident from the outset that a total rehabilitation job would require different training and knowledge than could be found in the ranks of the medical profession alone. Motive would have to be found or instilled in the patient. Relatives and friends, and the community as a whole would have to be educated to a new viewpoint regarding the disabled. All of the hospital personnel would have to be trained to participate in the effort. We found early in our pilot experience study that over-solicitous maids slowed the training program by helping the patient too much rather than allowing them to do the things they were supposed to do. Others undermined the efforts and goal of the rehabilitation group with pessimistic and hopeless remarks and attitudes. The needs for rehabilitation in the special service area around Lansing would have to be studied. Training, retraining and placement of the more completely rehabilitated calls for a specialist outside the field of medicine. The placing and utilization of the partially rehabilitated in sheltered workshops, good will industries, or home-bound industries presented another facet of the problem for which we sought assistance. Because of the newness of the field and the uniqueness of a rehabilitation center in a county hospital, the need for a multi-disciplined research program was accepted by all.

To meet the above needs we had but to turn to one of Michigan's great institutions of higher education—Michigan State College. Members of the Departments of Psychology, Sociology, Social Service, Nutrition and Dietetics, Nursing, Physical Education, and Speech and Hearing were called upon and gave magnanimously of their time and experience. Physiotherapist and Occupational Therapist from the Curative Workshop, The Crippled Children's Agency, and private practice came to our aid.

Next a pilot study was set up consisting of ten patients selected from the Ingham County Hospital census. Complete histories and physical examinations were made out on these patients and Activities of Daily Living Charts were filled out. A graduate student in psychology was employed to study this group for motivation. A male nurse was also employed to carry out as best he could

the program outlined by the medical profession and the physical therapist. A room was set aside and partially equipped as a physiotherapy room. Examining tables, parallel bars, mats and numerous gadgets were accumulated from local sources. A photographic record was made of the patients to be utilized later to measure progress of the work. The members of the Geriatric Committee and the Consulting Personnel from the College and Curative Workshop made weekly visits to the Hospital to direct the treatments.

By the spring of 1952 the soundness of the project was accepted by all concerned with it. The next step then was to try to secure financial backing. It was thought that if we could call the whole effort a research project we might secure help from a national foundation. Much time and effort went into setting up the project along these lines. This failed of accomplishment and by the summer of 1952 all we had to show for our efforts was a pilot study.

A revaluation of the problem in the summer of 1952 presented another concept which we decided to try. The idea was to divide the work of the rehabilitation center into a service function and a research function. The service function was thought of as being immediately helpful to the community and county and its cost should be borne locally. After the service plan gets into operation we expect to set up a number of research problems to be supported by such foundation help as can be obtained.

To test the soundness of the above concepts a meeting was arranged with twenty of the community's outstanding citizens. All the foregoing material was discussed with them. In addition, our concept of the local problem, our resources and our aims were presented.

The Local Problem

The Lansing-East Lansing Trade Center has a population of 187,000 people with four acute hospitals, only one of which has provision for rehabilitation services in the person of one physiotherapist with limited equipment and space. The city of Lansing has become a Special Service Center from a medical standpoint for an area which would conservatively include all the counties touching on Ingham County on all sides except where only a half a county is included. There are eleven acute hospitals in this area, none of which have any rehabilitation features incorporated in their hospital services. The total population of this special service area including Ingham County has a population of approximately 366,000 people.

One of our problems for investigation is to find out how many disabled persons there are in this population center. Applying the ratio of disabled to well-population as found in the study at New Haven, Connecticut, we would expect to find some 44,000 disabled individuals in this area, one-third of whom would be home-bound and one-third of whom would be under twenty-five years of age.

Local Resources

1. The growing and progressive City of Lansing is not only the Capitol of the State of Michigan and the center of a Great Trade Area, but is rapidly becoming a major medical center for a large territory of this part of the State of Michigan.
2. A hospital building of approximately 120-bed capacity which is in a better state of physical repair than most acute hospitals in this area.
3. A County Board of Supervisors and a Board of Social Welfare who are in complete sympathy with the progress and efforts outlined.
4. A unique, active and enthusiastic County Medical Society which has matched the enthusiasm of the Committee on Geriatrics of the Society which has been responsible for the initiation of this program in this area.
5. A great University Center at Michigan State College from which we have drawn help from a number of various departments that touch on the problems.
6. A Curative Workshop which in its first year of existence has made remarkable progress in handling the rehabilitation problem which can be cared for on an outpatient basis and which has certainly broken the ground for the introduction of rehabilitation at the hospital level.

Aims

1. To convert the Ingham County Hospital insofar as possible as the need requires into a Rehabilitation Hospital.
2. To give handicapped persons in our "treatment community" the advantages of the modern concept of rehabilitation. Initially, this group is to be taken from patients in the Ingham County

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A Plan for Living in Later Years

By Harold W. Woughter, M.D.

Flint, Michigan

NEW PROBLEMS in constructive utilization of leisure time have been created by the forty-hour working week, compulsory retirement at age sixty-five and the advancing age of life expectancy. Physicians have noticed increasing numbers of retired men and women visiting their offices with complaints of vague somatic discomforts and uneasiness of mind, conditions traceable in many cases to frustrations from being retired while still actively able to be useful producers. Many have been unable to find a satisfactory substitute interest while others are actually suffering financial destitution, their savings having become dissolved by the inflationary spiral.

Medical men have become aware of the growing practice of geriatrics, but they have also become aware that there are preventive measures in this stage of life as well as in the younger groups. There is a challenge to doctors to step out of their closely knit group of professional colleagues and become community citizens along with their neighbors, the lawyer, bookkeeper, minister and laborer; to plan constructively to receive and aid this older group so that retirement may be a happy relaxing experience and not one to be feared.

Herein is offered a community plan designed to be attractive to people in later life. One that is past the "pilot" stage of experimentation, and has sufficiently justified its existence to warrant consideration.

In 1935, Mr. Charles Stewart Mott recognized the growing need for the community to quietly provide constructive recreational and adult educational facilities to absorb the leisure time of the family group. It was realized that no program for older people could be planned to start on the day of retirement but that interest must be aroused sometimes years in advance with a diversified program in which many "trial runs" could be made. In this way an interest could be so aroused that decisions might be made by the individual before the retirement age concerning a new adventure that would be received with enthusiasm.

The Mott Foundation Program started in 1935 to conduct an experimental, demonstrative program in community needs and services, non-competitive with any other agency. The first year's budget was $6,000. It has now grown to include all ages and professions wherever a stimulus in community interest could be found. For the purposes of discussion only that part of the recreational and educational program that directly affects the geriatric group will be followed. There is no segregation of age groups, the elderly people infiltrate the program according to their interests.

Physical Facilities

It was thought that financial investments should be made in services to the people and not in additional buildings which in themselves might offer barriers. School buildings which were strategically located, publicly owned and publicly maintained were used. They were lifelong institutions, a source of pride and loyalty and as familiar to the community as the home. Their hours of usefulness should not end at four in the afternoon. The aging taxpayer, although he has long since graduated from the P.T.A., still supports this community school.

Administration of the Program

It logically follows that a program housed in school buildings and dealing with recreational and educational projects should seek the teaching profession for guidance. The Board of Education, an established, permanent body, appoints a Mott Foundation Coördinating Committee consisting of three members from the Board and three from the community at large. This committee appoints a director of the program (who in this case is an Assistant Superintendent of Schools) and reviews proposed budgets, plans for continuation of pilot projects and studies suggestions for new community services. The committee reports are reviewed by the Board of Education and when approved the annual budget is forwarded to the Mott Foundation Trustees. The funds received from the trustees are disbursed by the Business Manager of the Board of Education in the same manner as all other funds although earmarked for only those projects set forth in the Foundation's budget.

Dr. Woughter, a member of the M.S.M.S. Committee on Geriatrics, is chairman of the Mott Foundation Coordinating Committee.

Employes

There is a wealth of talent for recreational and educational effort to be found within the school system. However, instructors from practically every field are sought and selected on the basis of leadership, enthusiasm and capability. At present these include professional educators, housewives, tailors, psychologists, storekeepers, doctors, lawyers, artists, salesmen, furriers, chemists, librarians, ministers, radio technicians, interior decorators, home economists, clerks, stenographers, industrial workers, et cetera. In the present program there are thirty-three full-time employes, 282 who participate on an hourly basis and many volunteers.

Activities

Different communities naturally desire different activities. Some develop interest in hobbies, art and literature. Others demand educational programs to aid or augment their income, while some ask for predominence in purely recreational and participating entertainment. If a special program is sought and has the interest of at least ten people, it will be housed and a leader obtained for the length of time the interest is maintained or the course completed.

Some of the most popular activities are listed below:



Upholstering group in Mott Foundation class.

Educational

How to Start a Small Business
Successful Selling
Income Tax Returns
Creative Writing
Bookkeeping
Landscaping
Household Mechanics
Furniture Refinishing
Furniture Upholstering
Woodworking
Chair Caning
Wood Carving
Radio Repair
Auto Shop
Lampshades
Television
Photography
Leathercraft
Carving Cowhide
Dresden Craft
Creative Ceramics
Art Workshop
Water Color Painting
Oil Painting
Lettering and Sign Painting
Knitting
Dressmaking
Tailoring
Millinery
Furs
Slip Covers and Draperies

Recreational

Square Dancing Instruction
Couple Dancing Instruction
Social Dancing Instruction
Contract Bridge
Men's Club
Women's Study Club
Fly Casting
Bait Casting and Spinning
Fly Tying
Community Players
Fit as a Fiddle (health)

Once each year an Arts and Crafts Exhibit is held in one of the school Gymnasiums to which the public is invited.

Enrollment and Fees

Publicity by booklet, pamphlet and the newspaper is issued each year in advance of registration. The year has three sessions, Fall, Winter and Summer. Small fees from $1 to $5 have been charged for certain programs requiring special supplies and to discourage promiscuous enrollment. People who show genuine interest in an activity and feel that the fee is a burden may be admitted free.

Finance

It is not expected that any community would begin a program with a large number of diversified activities. As mentioned above the Mott Foundation Program started in 1935 in five scattered school buildings on a $6,000 budget. It has grown through public interest, of neighbor telling neighbor, until the budget now exceeds $350,000 yearly.

The cost of a program as outlined above, appealing to the older age group, can be financed for less than it costs to operate a medium sized elementary school for one month of the school year.

Conclusion

We are not hesitant in recommending this type of program to communities interested in making the geriatric period of life richer for its people. Nothing has been so gratifying to the workers in the Mott Foundation program* as the occasion of Mr. C. S. Mott's seventy-fifth birthday when the citizens of Flint, Michigan, filled the Industrial Mutual Association Auditorium to the rafters to pay honor to this gentleman, not because of his success in the business world, but because of his foresight in providing community resources capable of making a more abundant life.

*For detailed information, address Mr. Frank J. Manley, Director of the Mott Foundation Program, 529 Mott Foundation Building, Flint 3, Michigan.

SETTING UP A REHABILITATION CENTER

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Hospital, but with progress these facilities will be made available to private patients.

3. To further develop methods of rehabilitation.

4. To further our understanding of the personality changes involved when people become chronically disabled.

5. To establish a definite training program, using all the different phases necessary for a complete rehabilitation job. We expect to develop a center for the dissemination of information on rehabilitation to all those who are interested and at any level—whether it be an administrator of an acute or convalescent hospital or an individual responsible for the care of a disabled patient in a private home.

6. To do research on the problems of rehabilitation and geriatrics from the standpoint of sociology, psychology, nutrition and many other fields that may contribute something to the solution of the problems. This type of inter-disciplinary collaboration is unusual in scientific investigation and it is our effort to probe the advantages of this type of approach.

As a result of this meeting we have received enthusiastic support of all individuals and groups consulted, to the end that as of February 18, 1953, we have an incorporated Rehabilitation Center in Ingham County, financially supported by the County, and are in the process of adding some paid trained personnel to supplement the work of the voluntary groups.

215 North Walnut Street

The Value of the Periodic Health Examination

By William S. Reveno, M.D.
Detroit, Michigan

MOST OF US who are engaged in the practice of medicine will readily concede the value of the periodic health examination. It is the foundation of sound medical practice from which prevention and treatment stem and on which the most enduring patient-physician relationships are built. While mainly unspectacular, it is highly gratifying both to doctor and patient. It is the one effort in medical practice that is most enduring, least subject to radical change and lends itself readily to participation by the majority of practitioners. In short it is or should be the main professional purpose of every doctor of medicine.

But we are not all of one mind in this respect principally because of the changes that have occurred in the practice of medicine and partly through our own narrowed perspective. In the last half century we have witnessed a decided change in the pattern of deaths. Whereas the doctor was formerly pitted against a wide variety of maladies he is of late fighting either heart disease or cancer in at least half of his patients and heart disease alone is almost one third. Small wonder then that his attention has been centered on these organic diseases and the other seemingly less demanding ailments have been left by the wayside as has the person harboring them.

The factor that has narrowed our perspective is the phenomenal development of therapeutic procedures. I cannot deny that this has been a boon to humanity and shall continue to hope like everyone else for further discoveries. But it must be recognized that our fascination by the near conquest of infectious diseases and the high proficiency attained in surgery threatens to make mere technicians of us all. This would not be so bad if we had cures for most ailments but not having reached Utopia our concentration solely on the curative cannot but promote atrophy of the other attributes that are essential in a good doctor.

Our preoccupation with curative medicine has not escaped the notice of alert observers in the public health field. The vacuum created by our interest in therapy has generated a movement that can type us for but one part in the program of keeping people well. This movement that started with mass blood testing for syphilis, chest x-rays for tuberculosis and urinalysis for diabetes is even now elbowing its way into medical practice with the introduction of screening procedures for obesity and hypertension, and is waiting watchfully for the opportunity to invade areas we have seemingly staked out but are not working. Thus our efforts, aimed mainly against government to thwart entry of third parties into the practice of medicine, may be neutralized and the fight lost to another adversary by default.

If there is merit in our present system of medical practice and it is worth extending and expanding then we must take an accounting periodically to keep it on course. Side explorations into specialization, and, of late years, into therapy, are essential to our development and increasing usefulness but for too many of us to tarry too long in any of these ventures is to estrange ourselves from our patients and lose both face and place in the process.

There is then good reason for us to broaden our viewpoint so that we will become concerned with more than just treating or curing the patient of his presenting ailment. We must not be content with lancing a boil, removing a wen, prescribing a cough medicine, ordering a cathartic, suppository or douche or giving a "shot" of liver or penicillin because it saves us time to see more patients for whom to do the same things. Let us rather learn as much as we can about each of our patients, developing an awareness of their physical and mental potentials so that we may treat them more intelligently and protect their health and well-being more effectively.

Now I grant that all of this takes time and you will say that the demand is so great that we cannot do more than touch the high spots. There is but one answer to this weak defense. The patient deserves and expects undivided, earnest attention even though he may seem in a hurry; and we are short-changing him if we offer him anything less. To give the patient what he needs, not alone what he wants, we must discipline ourselves to become more thorough and we must allocate our available time more efficiently. Treatment of the presenting symptom or complaint should be regarded as a temporary or holding measure with a plan ready for the complete evaluation of the whole patient at the first reasonable opportunity.

How shall the periodic examination be carried out, how detailed must it be, and what facilities are necessary for its performance?

It would be presumptuous for me to tell the experienced practitioner how to conduct this basic procedure that he learned years ago in medical school. My only reason for taking your time with its details is that so many of us have through the years cut so many corners that it remains but a token gesture.

A detailed history is of the utmost importance. The time spent in its development pays good dividends. Not only does it elicit the subjective evidence for a proper diagnosis but, what is most important, it offers the opportunity for effecting a close relationship between the patient and doctor. Here there is a meeting and reading of minds so essential for a proper determination of what is troubling the one and the capacity of the other to understand. A skillfully conducted interview sifts out irrelevant material, provides essential background for a solid future relationship and comes up with a correct diagnosis 50 per cent of the time.

The gathering of objective evidence through the physical examination need not take nearly as long as the history. Here it is essential to leave nothing to the imagination and the examiner must discipline himself to cover the whole body systematically. Routine weight, height, temperature, pulse and blood pressure, a survey of the body build, inspection of the skin for discoloration, scars, change in texture, eruptions and hair distribution, and palpation for enlarged lymph nodes should come first. Then examination of the skull and scalp, the facies and the eyes, including a look at the fundi. The ears should be tested grossly for deafness with a tuning fork and the auditory canals investigated with the otoscope. In the nose the condition of the mucosa, the position of the septum and the presence of polyps should be determined. The mouth deserves close inspection under good light so that the entire mucosa (even that under dentures), the tongue, the teeth and the pharynx may be inspected. The parotid and sub-maxillary glands should be palpated as should the thyroid gland for size and consistency.

Despite the accuracy and indispensability of the x-ray it is still highly worthwhile to inspect the chest, looking for abnormal movements and pulsations, then mapping out the heart borders and the apex and percussing the lung fields thoroughly. The female breast should be thoroughly examined for change in texture, tumors and discharge from the nipples. Auscultation should be done not only to show the patient that we own a stethoscope but know how to use it—over the bare skin. Most of us have come to lean so heavily on the fluoroscope and x-ray that we have lost the ability to use our own senses in evaluating the heart and lung sounds. We order an x-ray first then corroborate the findings afterwards. Like doing a problem in arithmetic by looking up the answer first. When the x-ray isn't available we're lost.

The methods for examination of the abdomen are much less exact than those for the chest so that reliance must be placed mainly on inspection and palpation. The contour, abnormal movements, visible peristalsis, scars and distended veins may be noted at a glance. Palpation then can determine the presence of pain, tenderness, spasm, the texture of the abdominal wall and the presence of tumors, masses and enlarged viscera. Hernia, epigastric, umbilical, incisional, inguinal and femoral, should be sought in both male and female.

The male genitals may present hypospadias, ulcers, herpes, scabies, warts and fungus infections. There may be a scrotal hernia, an undescended testicle, epidydimitis, hydrocele and tumors of the testicle.

The female genitals may show skin lesions, urethral caruncle, urethral and vaginal discharge, cystocele, rectocele, perineal laceration and fistulae. Bimanual examination should be made for position, size and consistency of the uterus as well as changes in the tubes and ovaries. Inspection of the cervix by speculum under good light must always be carried out and the possibility of malignant invasion ever kept in mind. Suspicious areas warrant prompt action either by biopsy, study of scrapings incorporated in a piece of Gelfoam by the Gladstone technique, or examination of the Papanicolaou smear.

In the rectal examination one should look for hemorrhoids, fissures, fistulae, prolapse of bowel, ulcers and condylomata. Digital examination will reveal sphincter tone, stricture, polyps, hemorrhoids, tumors and the condition of the prostate and seminal vesicles.

The extremities and joints present readily evident changes such as edema, varicosities, fungus infection, deformities and vascular disturbances.

An observation often neglected is palpation for the femoral, popliteal, posterior tibial and dorsalis pedis arterial pulsations.

In the past, examination of the spine has usually been left to the osteopath or chiropractor who have made capital of the opportunity, jeering at us for our neglect. Inspection for deformities, limitation of motion and muscular atrophies, and palpation for tenderness and spasm take little time but may yield valuable information.

The neurological examination throws most of us for a loss. For practical purposes it should include testing the cranial nerves, motor function, the superficial and deep reflexes and sensation. The mental state can be evaluated at least grossly during contact with the patient at the general examination.

Now it has taken me much longer to describe what may seem to be a discouragingly large number of observations than to make the tests and note the signs. Actually few patients will present more than one significant abnormality, or at most a few. More important is it that the absence of many of the pathological conditions can be rapidly determined and a thorough examination completed in most instances in a surprisingly short time. If you familiarize yourself with the procedure and follow a definite plan, remembering what may be found and being alerted for it, you will rarely sell yourself short through omission.

Whatever the excuse may be for not doing a complete examination, it is far outweighed by the yield resulting from its performance. For example, a long standing blepharitis may be explained by an overlooked seborrhea of the scalp; a persistent throat irritation or cough caused by impacted wax in the auditory canal; a facial neuralgia from an unerupted third molar; endocervicitis; cervical malignancy, ovarian cyst so foreboding in the woman over forty, testicular tumors, pruritus ani caused by fungus infection transmitted from the feet, and peripheral vascular disease by absence of arterial pulsations in the feet. All of these point to the same precept: if you don't seek you won't find; and seeking constantly with a high index of suspicion is vital in the search for abnormalities.

What about laboratory procedures?

It is best to keep these at a minimum, using them after, not before the examination has been completed. Too many slot machine diagnoses are made by substituting batteries of tests for what may be more clearly seen by an alert examiner. Our diagnostic efficiency has been hampered in many instances by overdependence on the laboratory and we find ourselves quibbling over decimal points while the clinical picture is trying desperately to give us the answer we seek. Many of us have become so imbued with what the laboratory offers that we will not venture into the open without making certain that its complete facilities are available. It is not my purpose to belittle this facility but to emphasize its proper use as a supplement to our five senses and the clinical acumen which these supply for us.

Looked at in this light the laboratory procedures divide themselves into two groups—those that are essential to every diagnostic work-up, the simple tests, and those that are to be invoked in running down a particular clue.

The simple tests are readily available to all of us and are best done under our immediate supervision. These consist of a urinalysis, stool examination for ova and parasites and occult blood and a complete blood count. A blood Kahn should be done on every patient, facilities for its performance being accessible to everyone. A simple glucose tolerance test can be performed with a specimen of urine obtained two hours after a rich carbohydrate meal. Kidney function may be evaluated by specific gravity determinations on urine specimens after a day of abstinence from fluids and after abundance of fluids for a similar period—the so-called concentration and dilution tests.

Gastric contents, sputum and urethral and vaginal smears present no great technical problem to any of us.

The remainder of the laboratory tests belong in the realm of special procedures—not to be invoked for window-dressing but only when clearly indicated.

X-ray study of the chest is a highly valuable supplement to the examination and should be included if at all possible. It represents a wiser expenditure for the patient than do many of a long list of impressive laboratory procedures. Other roentgen-ray studies are of course to be made only when indicated.

Having completed the survey and summarized it the final step is to impart to the patient the findings and the implications. It is not enough to tell the patient he's O.K. and to let it go at that. He's quite liable to feel that a lot of his time and money have been spent to discover something he

knew all along. Nor is it fair to hit him between the eyes with a diagnosis and prognosis that stands to change his mode of life abruptly. The average patient will accept thankfully information about himself that is shared with him as a full partner. Our obligation is not fully discharged unless we take the time to talk things out, giving the patient the opportunity to ask questions.

How much should an examination cost?

Quite obviously the cost should be neither prohibitive nor punitive. If we attempt to market our product at too high a price few will be able to buy it and the public demand and need will either not be met at all or filled by shady opportunists or the government. Neither can we afford to be high-handed or punitive in our demands for that is the surest way to estrange our patients. A fee based on a fair return for time spent is the most equitable approach to the problem.

Assuming that it will take an average of one hour to complete the study and from four to six patients can be seen ordinarily during that period at a fee of $3.00 each then the fair charge would be from 12 to 15 dollars. If the fee per patient visit is higher the cost would rise in proportion. An additional charge of from 5 to 10 dollars for the routine laboratory studies would be added making the total cost between 17 and 25 dollars. Should special laboratory procedures be indicated, their costs—at current rates—would constitute an added charge.

Now this may appear to some to be too high a figure but the complete package that is offered comes to grips with the patient's problem at once, eliminating, as it should, many visits during which only presenting symptoms are shut off or "needled." Few patients will fail to sense the saving in time and money nor to appreciate the merit of the service being rendered.

Is the public sold on the periodic health examination?

Any of us who doubts that there is a growing widespread demand for this type of service needs only to count the thousands having blood tests for syphilis, chest x-rays for tuberculosis, urinalyses for diabetes and examinations to detect cancer. Life insurance companies have been promoting the cause for years and lay writers in newspapers and magazines are beating the bushes for us so that there is hardly a person who is not acquainted with the idea. The sick are of course interested in getting well but the well are interested in staying well and they depend on us to do the job.

In recent years, management, recognizing the sizable investment in its executives, has insisted that they have annual health examinations and the move has paid off in healthier, more efficient workers. Among 575 men examined in one year for a large corporation there were twenty-six with duodenal ulcers; fifty-one with hypertension; twenty-nine with generalized arteriosclerosis; six with coronary heart disease; three with angina pectoris; twenty-eight with prostatic hypertrophy; four with early pulmonary tuberculosis; thirty with arthritis of the spine; eight with diabetes; thirty-seven with obesity; and forty-eight with anxiety, tension and exhaustion. A total of 802 abnormalities were disclosed, most lending themselves to correction.

Similar experiences have been recorded with other groups—all adding up to the same lesson: complete examinations repeated annually disclose defects when they are easiest to correct. Result: high yield on the investment to the whole community. Certainly the public doesn't need to be sold!

To meet this burgeoning demand squarely we will have to realign and broaden our practices to include all people, the well and the ill, the whole person, not just the part that is ailing. We will have to recognize that preoccupation with the curative phase of medicine must make technicians of us all relegating us to a remote corner in the health field and separating us from the commanding position we now hold.

We thus have in the periodic health examination a priceless tool with which we may serve people better and keep the practice of medicine paramount. If we neglect this opportunity we will have only ourselves to blame as others take up what we have abandoned.

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The Social Impact of Longevity

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THE POPULATION of the world is increasing at a rapid rate. This increase has become much more evident during the past fifty years than ever before in the history of man.

A remarkable decline in mortality accompanied by a fairly constant or slightly declining birth rate has changed the old balance of population. Many more persons are surviving more of the hazards of life and live to a greater age than ever before.

The basic life span probably has remained unchanged, since we always have had an occasional individual who lived to be one hundred years of age. But infant mortality, young persons dying from the acute infectious diseases, accidents and wars heretofore have kept the average age at death rather low for thousands of years. During the past fifty years infant mortality rates have been going down quite rapidly; many acute infectious diseases of childhood are no longer epidemic; accidents and wars still kill a great many persons but of the total number injured a much higher percentage of them are rehabilitated than ever before.

Late birth rates are about forty per thousand and death rates are dropping to fifteen per thousand resulting in an annual increase in population of about three per cent, a relationship already established in quite a number of nations. Within the foreseeable future, the world's population will be increased every year by about 38 million persons.

Average life expectancy in the United States has increased from about forty-six to sixty-eight plus during the past fifty years. The number of persons over sixty-five in our population has been increasing rapidly.

1900.....	2,000,000	
1940.....	9,000,000	
1950.....	12,000,000	
1975.....	25,000,000	(estimate)

Life in the United States has been changing appreciably during the past few decades from a young toward an older society and this trend will be more noticeable in the future.

A child born in 1953 has some chance of living to be one hundred years of age, assuming that he escapes death by violence, or perhaps we should say that a greater proportion of the children born in 1953 will live to approach one hundred years than ever before in human history. Small credence should be placed in prospects of a life span of one hundred fifty years.

An important trend in present-day living is the conspicuous shift of population from the country to the city. In 1800 six per cent of the people of the United States lived in urban areas. Today sixty-three per cent of the population lives in the city. This rural-urban shift has had a significant effect on the social problems of the aged. Farm houses in the old days usually were large and could accommodate aged parents or grandparents without too much trouble. Agricultural employment was of such a nature that an elderly or slightly infirm person could perform a number of useful tasks until very late in life. Another factor was that there were more children in the farm family some of whom could be detailed to care for grandma or grandpa. All this was before the automobile, the farm tractor and birth control invaded the country.

Contrast this with contemporary urban life. The high cost of building has made most new houses small; five rooms is about the average. There is really no place for oldsters to live with their children. Urban occupations are such that an individual is employed either full time or not at all. It is a little like being sick in the army where a soldier is either a patient in the hospital or he is on full duty. The city family has fewer children to share the duty of caring for aged parents. In general, urban culture is such that its god is efficiency and the infirm and the aged are cast aside irrespective of the social and mental loss occasioned by this technologically efficient method of doing things. And I believe that this situation will be intensified in the future.

As older persons become an increasing proportion of our population, they may influence the political situation because it is evident that they will have in their hands a greater voting power than ever before. It may even come to pass that their votes will be a major factor in some future election.

Some possible implications of this are: first, those elected to political office may in general be older, for usually older persons tend to vote for older candidates; second, if older persons control

the vote, they may well force legislation favorable to some wild or irresponsible scheme for promoting large pensions or other forms of assistance to the aged; and third, as our population ages, our political conservatism in national and international affairs will be more pronounced.

One of the most far-reaching of the social psychological effects of aging is occasioned by loss of employment on the part of older persons, especially those who have worked hard during the major part of their lives. Forced retirement often imposes a great hardship on a man or woman accustomed to work. The suddenly retired person does not know what to do with himself, and idleness soon leads to degeneration, both mentally and physically.

Some form of avocational training must be introduced. It should be introduced before the day of retirement so that the elderly person may develop an avocational interest and does not have to explore a planless future for something to do.

Another important aspect of the social psychology of old age is to understand the period of readjustment that comes when a person's wife or husband dies. It is not only the loss of a mate but friends and relatives as well that cause an older person to become despondent. Other interests must be brought into such a person's life to help make up for the loss of lifetime companions.

I think that it might be a good plan for all of us to cultivate a large circle of friends against the day when they pass away one by one. I think that it might be a good plan for all of us to cultivate a large number of intellectual pursuits other than our regular work against the day when that too may be taken away.

Consider for a moment the life of an individual who goes to school, concentrates heavily on one subject, paying no attention to anything else, getting to be a professor and teaching the same subject without variation for forty years to the exclusion of other matters that can be part of life.

Contrast this with a man, let us say, who is born and raised on a farm, goes to school and on to a professional college, serves as intern and resident, spends a couple of years in the army, one year in France, works as a doctor of medicine for many years, but all the time is interested in a variety of pursuits such as: stamp collecting, radio building, literature and book collecting, writing, photography, collecting several forms of the fine arts and becomes almost professional in a variety of these fields. Such an individual may seem to have lived many lives, or stated another way, is young again every time he embarks on a new enterprise.

The general practitioner of today is finding that a gradually increasing number of his patients are in the older age group and this trend will continue. Furthermore it seems quite natural and logical that these older persons should become the patients of the doctors of general medicine. It has been suggested that the study and treatment of the aged should be a particularly suitable province for general practitioners.

Leaders in this comparatively new field of medicine, geriatrics, are studying the aging process in all of its various ramifications. This study seems to reveal what many physicians have thought for a long time, namely, that senility is not a disease entity, that the aged patient does not die from senility, but from one or more frequently several of the diseases well known as causes of death since time immemorial, including, as always, acts of violence, accidents and war.

But the primary question as to why the aged patient is more susceptible to certain diseases or certain tissue changes and eventually succumbs to some infirmity remains almost as obscure as some years ago, except that we know that the renewal of cells in the body does not take place as rapidly in age as in youth; in fact, some cells never regenerate, such as the brain cells.

The achievement of old age is not entirely an unmixed blessing. Longevity seems to be fine on an individual basis, the way physicians look at the problem, but twelve million to twenty-five million oldsters are bound to alter the American economy and, unless handled with considerable foresight and some intelligence, can upset the economic equilibrium as much as dust bowls and locust waves have in the past.

That old age has become of economic concern to the citizenry of the United States is revealed in the numerous pleas for various pension plans to help people in their later life.

Currently out of the twelve million now over sixty-five, about ten per cent receive their primary support from investments, annuities or other returns on personal thrift, or good luck in inheritance bequests; another thirty per cent depend upon Federal Old Age and Survivor benefits; and twenty-nine per cent upon Old Age Assistance program. Some seven and one-half per cent get

along on pensions that they earned while employed by commercial firms; while six and one-half per cent rely on pensions from their former jobs in Federal, State or Municipal service. The remaining seventeen per cent simply are not covered.

It is very evident that today's rising living costs put a severe strain on all persons whose earnings are cut off at age sixty-five.

Such a circumstance seems arbitrary and unreasonable. Every physician has personal knowledge of a great number of persons who are physically and mentally competent to continue their work for ten or fifteen years after their sixty-fifth birthday, while others of course have become infirm long prior to that age. Employed people are much happier than idle ones and incidentally they continue to live longer. It is a most tragic waste of resource to the family and a lamentable loss to the national economic community to permit persons with developed skills of various kinds to become unproductive. Experience and wisdom should be listed among a nation's most valuable assets.

While it is true that heretofore in America we have placed much emphasis on youth and speed and mass production, nevertheless, with life expectancy being extended almost daily, this approach to retirement will have to be revised drastically and older persons retained in productive employment, otherwise the increasing non-productive members of our society will constitute such a burden on the productive segment that crises will occur continually in food supply, in housing and in the whole pattern of life and its economics.

The old pattern of Youth, Middle Age and Retirement is incompatable with modern society. A new cycle of life is in the making.

Let us learn all that we can about the aging process.

Let us take care of these older persons.

Let us act as adviser occasionally on family problems that may be outside the field of medicine.

Let us be very efficient in determining the causes of their infirmities but above all let us be kind and considerate to them because sometimes all that we can offer in diseases like advanced cancer and arteriosclerosis in the aged is kindness and surely they deserve a little consideration in their last days.

THE PROPER EXAMINATION OF AN OLDER PERSON

(Continued from Page 502)

One of the worst mistakes we can make after we have examined an older person is to assume the attitude of indifference just because there is no major disease present, pass him off with a remark that, "With a physique like that you will live to be ninety." The aging person is looking for corrective treatment where indicated. He wants advice concerning his work, how much and how long should he work? How much golf should be play? The admonition to "take it easy" means nothing. He is looking for corrective advice and definite instructions and re-examination at stated regular intervals.

The treatment of an acute pathological condition or the surgical removal of a diseased organ is a necessary part of advice, but the advice and consideration we give to the total problem of the aging person depends on the care with which we have examined the patient and interpreted any defects in the whole life of the person.

Summary

1. The total examination of an aging person was discussed, pointing out the necessity for evaluation of all of the related problems.

2. The biological ages and changes which occur in them were discussed.

3. It was shown how functional changes affect the age of a person.

4. The proper examination must include advice for the prevention of disease, as well as setting suitable time for regular periodic re-examinations.

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Upon Considering My Age

By John M. Dorsey, M.D.

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*Now Is The Prime Of Life**

Old age is new. Yet, further on,
Man's life has nought to do with time.
"When youth is gone, why linger on?,"
Ask swaddled babes not free to climb.

"What *is* old age?," the youngster cries
Who sage and age has yet to try.
"Just fuller measure," Age replies,
"We ply our youth until we die."

Most sickening of creeds outworn
Illusion Time palsies our will,
Devouring life as soon as born.
Help NOW the myth of Time to still.

"Past" and "Future" cannot own us.
NOW holds the only life of "When"
And can heal the hurts that Chronos
Brings on humanity with "Then."

Time's toll in human sacrifice
The present moment can restore.
Soul heal in this deep insight lies:
Man worthy NOW and nevermore.

Only the Present Age can tingle,
NOW gives Eternity its sense.
The nostrum in this little jingle
Holds life's law: To live, commence!

OLD AGE is the very first subject treated in Plato's principal work, "The Republic." Socrates, the narrator, inquires of the aged Cephalus: "Is life harder towards the end, or what report do you give of it?"

"I will tell you, Socrates, he said, what my own feeling is. Men of my age flock together; we are birds of a feather, as the old proverb says; and at our meetings the tale of my acquaintance commonly is—I cannot eat, I cannot drink; the pleasures of youth and love are fled away; there was a good time once, but now that is gone, and life is no longer life. Some complain of the slights which are put upon them by relations, and they will tell you sadly of how many evils their old age is the cause. But to me, Socrates, these complainers seem to blame that which is not really in fault. For if old age were the cause, I too being old, and every other old man, would have felt as they do. But this is not my own experience, nor that of others whom I have known. How well I remember the aged poet, Sophocles, when in answer to the question, How does love suit with age, Sophocles—are you still the man you were? Peace, he replied: most gladly have I escaped the thing of which you speak; I feel as if I had escaped from a mad and furious master. His words have often occurred to my mind since, and they seem as good to me now as at the time when he uttered them. For certainly old age has a great sense of calm and freedom; when the passions relax their hold, then, as Sophocles says, we are freed from the grasp not of one mad master only, but of many. The truth is, Socrates, that these regrets, and also the complaints about relations, are to be attributed to the same cause, which is not old age, but men's characters and tempers; for he who is of a calm and happy nature will hardly feel the pressure of age, but to him who is of an opposite disposition youth and age are equally a burden."

Of all of the psychological treatises on senescence this writer has found, Emerson's essay entitled "Old Age" stands out as most superior, even to Cicero's *"De Senectute."* Among other profound insights he observes: "When life has been well spent, age is a loss of what it can well spare, —muscular strength, organic instincts, gross bulk, and works that belong to these. But the central wisdom, which was old in infancy, is young in fourscore years, and, dropping off obstructions, leaves in happy subjects the mind purified and wise. I have heard that whoever loves is in no condition old."** Past sixty he corroborated his earlier views that mental material never lost its youth, "Within I do not find wrinkles and a used heart, but unspent youth." We are reminded of Goethe's self-observation, "Age does not make us childish, as some say; it finds us true children." That man never grows senile who keeps access to the child in his make-up. Free imagination, comprehensive kindness, and extensive recognized self-experience are essential to the development of the whole physician as of the poet. "Fed on the dry husks of facts, the human heart has a hidden want which science cannot supply; as a steady diet it is too strong and meaty, and hinders rather than promotes harmonious mental metabolism. . . . To keep his mind sweet the modern scientific man

*Old verses from the writer's hoary mind.

**Medical educators recognize the important distinction between "senility," a misleading term, which applies to the disorders occurring in advanced years, and "senescence" which credits a man of advanced years with his full health significance. Careful investigations in senescent people disclose no pathology.

should be saturated with the Bible and Plato, with Homer, Shakespeare, and Milton."† It is true that in certain of us human beings it is very difficult to observe that age does represent power and wisdom. We might have to quarry for it, but we would certainly find the poet in every one. Of most of us we may have to sing with Thoreau:

> "My life has been the poem I would have writ,
> But I could not both live and utter it."

A few plain questions. How many are the days of the years of thy life? What is the best meaning to attribute to the idea, to come of age? How much have we been aware of living our own life? When is our turn to do our own dying? Have we recognized that life for us is about us? Are we really old at all until we find our several selves?

This matter of having so many more of us able to die a so-called "natural death" than ever before, has created a very acute situation, not only in our hospitals but elsewhere in our communities, especially in our homes.‡ In our own home many of us have had the care of one or even two of our parents over a period of many years and are thoroughly familiar with the statement that it is very difficult for two families to live under the same roof. It is difficult, yes, but let us ask what we have ever found worthwhile in our life of which we have been unable to observe, "It was hard, was difficult, while undertaking it." "A nation cannot last half slave and half free." Let us use Lincoln-like integrating insight and ask if a nation can last if one important fraction of it is being neglected, and the rest "apparently" taken care of. During the past year this writer was called in consultation with an able internist caring for an octogenarian patient who, while under hospital treatment for a fracture, seemed to be entering upon a mental, including general physiological, collapse. Only when visited by her daughter did she "brighten up" temporarily. Renouncing a suggestion that the patient be transferred to a more cheerful and home-like hospital, *another strange place,* she was instead returned to her home where in her beloved surroundings she enjoyed recovery best described as sudden. Her internist observed that through this demonstration he became more than ever "converted" to the efficacy of psychological medicine.

There is a surprising need to dispel certain popular illusions around the true meaning of growing old. A first one identifies aging as getting ready to die. Thoreau noted, only ill cared for men grow hard. "It is a result of despair, this attitude of resistance. They behave like men already driven to the wall." For all of us who are in advanced years the few remaining years of living are the most important and cherished of all. The older we become the less apt we are to misprize the life left us, and this life-loving insight is one of the very greatest advantages of a healthy senescence. It does seem most probable that "old age," as popularly conceived, is indeed a very premature condition brought upon us by disinterest in living.

> It is too late! Ah, nothing is too late
> Till the tired heart shall cease to palpitate.
> Cato learned Greek at eighty; Sophocles
> Wrote his Grand Oedipus, and Simonides
> Bore off the prize from his compeers,
> When each had numbered more than four score years,
> Chaucer, at Woodstock with the nightingales,
> At sixty wrote the Canterbury Tales;
> Goethe at Weimar, toiling to the last
> Completed Faust when eighty years were past.
> These are indeed exceptions; but they show
> How far the gulf stream of our youth may flow
> Into the arctic regions of our lives . . . .
> For age is opportunity no less
> Than youth itself, though in another dress,
> And as the evening twilight fades away
> The sky is filled with stars, invisible by day.*

If we wish to observe every age as a developmental era preparing for death, and live within this shadow of our numbered days from the very beginning, all well and good, but singling out the last years of the human being's life for that particular purpose is one of the greatest inhumanities. Emerson has observed how easy it is to confuse the aging process with such masks of age as dim vision, loss of hearing, gray hair; the real essence of age being intellect. Becoming older is essentially having hived up accumulative self-experience. The tremendous wisdom of old people is very inadequately mobilized, due at least in part to the fact that the senior *appears* to separate off from

†Sir William Osler, *Science and Immortality.*

‡Now 12,000,000, or one in thirteen of us, are over the age of sixty-five years. By 1980 it is estimated conservatively that over 40 per cent of the population of the United States will be over forty-five years of age. At the present time 27 per cent of our United States population are over forty-five years of age. The life expectancy of the average Roman or Greek citizen was somewhere around twenty-five years; of the American during our revolutionary war period, around thirty-five years; of the United States citizen 100 years ago, forty to forty-five years; of the United States citizen today, sixty years. It is well to have greatly in mind that such statistics as these are misleading to all who are not aware that the most of us old people are able to take care of ourselves often better than we could when we were younger.

*From Longfellow's *Morituri Salutamus.*

his peers and juniors through gaining ultimately a clearer view of his own integral supreme importance as a human individual. As Christian Gauss has reminded us, let us understand fully the difference between individual and individualist. The individual receives from others and bestows upon others with only gain to self; the individualist subtracts from others with only loss to self.

How can we further ourselves along the democratic direction to mental health eminence? What is big and what is little? How shall we lead ourselves? In nothing have we so strong an interest. We beware the man who finds his happiness in telling others what to think and do. For seeing how we shall lead ourselves mentally, let us observe mental health distinctions. The well mind is distinguished especially by these two necessities: (1) to protest against the "doing others' thinking for them" hypocrisy and (2) to observe for one's self. Of all self hurts there is none more purely vicious than his who employs vigor to keep down the individuality of his less favored fellow creature. Doulocracy! The mentally well man knows that he has all that he can do in being the agent of god *to himself*. The mentally sick man cannot know that of all kinds of misfortune, misbehavior is the worst kind, that an ill manner is the worst form that illness can take. There is but one rank that makes for friendly communion rather than a sense of injury, and that is the rank of honor, never conferred, ever earned by enduring more and more of our onefold human nature.**

A second illusion confuses simple addition with subtraction. "Old" does not negate "young," but includes it. When we get to be twenty-five, thirty-five, forty or fifty years of age, there is a strong tendency on our part to feel that this means we are Tithonus like, no longer one-year olds, two-year olds, three-year olds. If we are on the fiftieth floor of a building, all of that does not mean that the sub-structures are unimportant, including the ground on which the building rests. Cicero treated this aspect, "For as I admire a young man who has something of the old man in him, so do I an old one who has something of a young man." No matter the age, it is chiefly the little helpless child who benefits from our medical presence and offerings. Seeing the wonderful infant, child and youth in every old man and woman is the only way to come into the healing conditions of the geriatrist. Any other consultation is a collision, a heartless, thoughtless blur and noise which we are properly guilty and ashamed of. May we differentiate ripe and rotten. The aging process is always a ripening one, a securing of further self-experience. It is as though nature says to us aging ones, "Where I take away extravagance I add economy. Where I take away the distraction of earlier living I add the concentration of later living. Where I take away what is precious I leave what is all the more precious." There is an instructive story told of one of our early American Indians, Redjacket, who had weathered the storms of vigorous life, listening to the young Indian braves boast of their exploits. At this time he was some sixty years of age. He listened a little while, and then said, "Yes, but remember the sixties have all the forties and twenties in them." Muscles and glands are hardly recognizable for their mental significance in youth when "doing" seems hardly recognizable as a form of thinking and feeling. The great, in fact only, affairs of man are mental. Man can enjoy the full exercise of his mind as long as he lives. The active pursuit of human interests carries on as long as life does. As Solon we grow old "daily learning something new."†

The only safe and sane definition of the aging process relates it to progressingly greater self-experience. A so-called old man, realistically conceived, is one who has lived his babyhood, childhood, adolescence, and young manhood over a longer period than has someone who cannot claim his years. As Isaiah said, "For as a lad shall one die 100 years old."

Not only is *now* the prime of life, also it is the *only* time of life for everyone and the only experience anyone can ever have in eternity. All of us shall have to remain abnormally tense to the extent that we do not cultivate the present tense. Quite as Emerson perceived, "We do not count a man's years, until he has nothing else to count." There is no such possibility as just putting an old mind on old shoulders. If by the idea "growing old" the essential meaning is invested in the first word and not in the second, then our definition of

**"Young people take inordinate interest in what they think is practical study, failing to realize that self-knowledge, which is indispensable to the most practical judgments, is the highest practicality. In a period of technological prodigies and of economic complexity, the crucial problem of education is to sustain and develop the individual." 1948 Report of the Commission on Liberal Education of the Association of American Colleges.

†Note the venerable Michelangelo's motto, *Ancora imparo* (I am still learning).

aging is not a deception and we observe it truly as the accumulating of wisdom. Whoever is interested is not at all "old," or better said, whoever is interested is old in the healthy sense of the term. Dr. Holmes had the matter upright when he said, "Old babies that we are."

A third illusion holds that it is possible for us to do the respecting of old people for them. Self-respect has to be something engendered within the individual himself, and our task as physicians and educators is to provide environmental and circumstantial settings which will enable our older people not only to retain what self-esteem they have, but enable them to increase it. Self-respect is first of all the product of healthy family living. The family physician prescribes it as nourishment and remedy; the pediatrician likewise. The most efficacious geriatrics begins with the best pediatrics. Although no one can redeem an oldster's self-respect but himself, nevertheless we can do much to enable aged man to help himself in various ways involving creature comfort. It is a hopeless prospect for him to have to look forward to a future of great inequalities and we can do much to reduce such injustice. Our patients need all of the hope we can muster.‡ Pindar called hope the kind nurse of age and the companion of life, "hope which is mightiest to sway the restless soul of man."

A fourth illusion declares that it is possible to live well in a family living situation where the parents of the children are concluding, "We are going to take care of our children but we are not going to have the same respect for the individuality of their grandfather and grandmother." A person is a human being as long as he lives. *It is impossible to be humane with children without being humane with any old people who are in the home and community.* Old people react to mistreatment with mischievous behavior just as the child does. Also they react to respectful, loving consideration just as the child does. We cannot well single out anyone to be partial to at the expense of his fellowman. Our human constitution makes that impossible. Although it might appear otherwise, one man's loss cannot mean another's gain, and one man's gain cannot mean another's loss. All is going on inside of each of us, and a harm or hindrance to one part of our human nature cannot be a help to any other part. The most important dictum that was ever laid down for the medical profession is "Physician heal thyself," because that is what each one of us is doing all the time. And yet one of the most common mistakes that we encounter is this illusion that what goes on between the parents and their parents can be isolated from what goes on between the parents and the child.

A fifth illusion claims that old people are not "treatable," do not respond well to the healing agent, whereas in reality their recuperative force is wonderful. Recovery from illness is not correlated with the chronological age of the patient, but rather with the duration of the disease and the disordered personal integration which the disease is a symptom of. We have never seen a patient about whom it could be said accurately, "This patient cannot help himself, this patient cannot improve, under any circumstances." Anyone under the care of a physician forced to prescribe this unhealthy concentration of hopelessness, an outlook without insight which is too hard on the physician and too hard on the patient, ought to be referred so that both individuals will not continue hurting themselves. "Geriatrics today is a deviation from the attitude of the medical profession toward the aged and their debilities hitherto and largely even now prevailing. The medical profession hitherto has been following rather closely the general attitude of the lay public, and has been treating the aged sick with a feeling of helplessness and with apologies for Father Time. The ailments of the aged have been taken for granted, and the outcome as a foregone conclusion. However, because of a chain of circumstances—some as a result of the successful labors of the medical profession, and some for which we can take no credit —life expectancy has been steadily on the upswing."*

A sixth illusion tells us that it is easy to size up an oldster. We do not always like to identify with older people. That is the way it has to be until we learn our wonderful stake in greater sharing.

‡In his poem "The World-Soul" Emerson reminds us how hope and health spring eternal in the human breast:

"Spring still makes spring in the mind,
When sixty years are told;
Love wakes anew this throbbing heart,
And we are never old.
Over the winter glaciers,
I see the summer glow,
And, through the wild-piled snowdrift,
The warm rosebuds below."

*Excerpt from Dr. Herman Seidel's sensible report "Geriatrics and the General Practitioner." *Geriatrics,* Vol. 3, No. 2, March-April, 1948.

The same general kind of resistance tends to obstruct our awareness of our identification with our senescent and psychopathic fellowmen, namely, the fear of our unpreparedness to be kind in terms of these elements in ourselves. Napoleon helped himself greatly with a favorite maxim familiar to us practitioners: "Respect the burden." The ostracized oldster feels most keenly of all the lack of medicinal influence of his active imagination, a deficiency produced by his isolation.

When we look back through our history we find that it was always the older people who held the important places in the councils and government. For instance, senior and senate, have the same word root as senescence. The patrician of Rome has the same root as the *pater* or father. The gerusia was the Senate of Sparta. In the church we have the presbytery, the elders. Our American Indians called their Almighty, "Grandfather." All of this historical evidence refers to the health source in seeing our older self as a veteran, even as the Chinese view their elders.

Jack London with his extraordinary insight into human affairs wrote a short story entitled "The Law of Life" which depicted the method of the Eskimo for disposing of the aged, a plan involving essentially leaving the member of the family who is too old to travel with a supply of wood the sparks from which will synchronize with the spark of life. Mr. London has the abandoned old Eskimo Koskoosh living in the past, hoping his son's heart will soften so that he will return to take him on with the others less used, and reflecting upon his granddaughter Sit-cum-ta-ha's flighty mind and careless heart in accounting to himself for the fact that she did not gather more faggots. If the granddaughter were able to identify herself more accurately with her grandfather all of us are certain that the consequent woodpile would hold out until the return of the tribe.

What we are up against as one of our most difficult medical assignments is the practice of respecting our several selves in the presence of an older person. I dropped into a home room where a dear old lady was sitting up, alert, kindly, imaginative, experienced. She was eighty-eight, wearing glasses, reading books. Some of her manifestations of power had changed, taken different directions, but she was interested, she could love. In touch with all about her, she talked mostly about early Detroit. We observed at the end of the session that I had helped myself very much, particularly by finding the wonderful worthwhileness possible as long as we live. The practice of medicine *is* the practice of "Physician heal thyself," and if we physicians are not helped at the end of a session with our patients, it is a good plan to ask why we are not helped.

Sometimes it is difficult to be aware of our identification with an older person who has had limited opportunities, whose chances for respecting himself have been slim, and whose concentrated attitude is a pointed one of self-disesteem. An old lady once upset a hospital staff by repeating, "I want to die, I want to die." Finally a veteran consultant observed with her, "I can understand that you want to die, I have that feeling come to me too." She replied, "For goodness sakes, if these are normal thoughts and feelings, tell these doctors and nurses, will you, because they are making me out a monstrosity." For the first time she smiled, seemed relaxed and secure in her wisdom. It is not always easy for us to be aware of our identification with these older people because they really put our endurance to the test. They have been through so much more than we have.

If we go into a home and see the wife caring for the husband's mother, who never wanted him to marry the woman in the first place and who is still bent on bringing about a separation if possible, and the young wife "lets fly" at the mother-in-law, it helps to see that the young woman is necessarily beside herself. All she needs is to be able to help herself some more. She is in a difficult situation only made worse by the blind illusion, "You should not be the way you are." On the other hand, we have the mother-in-law who also needs to be in surroundings that would be conducive to her carefully nurturing her own feelings of self-respect. Jealousy and spite may be her ways of expressing her injured love, her ways of caring for her outraged feelings. From consulting all of the facts we soon come to the observation that every one is doing the best possible under the existing circumstances, and that all need help in order to be able to help themselves to their better best. Each of us is in Montaigne's life situation but we do not all have his 360 degree angle of self-observation, "All my hope for all my help is myself."

A seventh illusion, and in many respects the hardest to dispel of all, sees the aged man and

woman as unemployable.** Employment of the aged is desirable to the extent that it represents enjoyment. The joy of living one's own life is the unit of measure of human health. Every man's education rightly viewed has no other function than to guide him to high self-esteem. There is no better, in fact no other, way for man to live up to his capacity. All of our maturing life experiences have been amplifications of this thought, once it was found in ourselves. Blind self-disesteem forces maldevelopment and ill repute.†

Despite the constant evidence of our senses that the person who is able to see himself in the most of us is ever the most charitable of all, and that the person who can see himself in the fewest of us is ever the least charitable of all, nevertheless the fashionable objection to honest devotion to self-growth continues to be that it is too "selfish," that it is too disregardful of the rights of all. This understandable and well-meant objection to devotion to self-fulfillment is found to be a function of lack of mental integration in the objector and varies in direct proportion to the amount of mental integration present.

To be alive is to be experiencing self. That is all. According to this way of observing, it has been granted only a few people to live fully. All of us can live more fully, but only if we can learn to share more. We can share more only by acknowledging more necessities in our ever growing self. To live fully is to support "the weight of centuries," but good-naturedly instead of only mean spiritedly, "to take arms against a sea of troubles," but well disposedly, instead of only "sicklied o'er with the pale cast of thought." To live fully is to have learned from experience that mankind's instinctive repudiation of truth and necessity is sufficient explanation of all human guilt. To live fully is to have learned from experience that truth, necessity, rewards no attempts at expiation, except compliance, obedience. Only that man can be truly virtuous who has learned from experience to make a virtue of necessity. "God's will be done," says the church, of everything that is, as the indispensable beginning for subsequent changes for the better. What is the alternative to "making the best of it?"

Surely industry has the cart before the horse which allows for the product but not for the man. Let us trust that arbitrariness towards retirement age will soon be recognized as incompatible with the rights and privileges of citizenship. Emerson points up the clear truth that there is a proportion between the designs, plans, of a person's life and its duration! If we make our law a curse, by our own law we shall surely die. Until we succeed in creating a system, not of old age retirement, but of old age employment and enjoyment, which reflects reverence for the dignity of the individual man, we cannot regard our culture as essentially different from the kind which retired Koskoosh.

An eighth illusion, more disastrous than any other, puts down as peculiar to old age certain illnesses and weaknesses which have nothing to do with old age at all but rather are true both of ill health at any period and character deviations which have been carried on from infanthood and childhood. As Eli Metchnikoff put it, such "old age is a preventable disease." It is preventable, however, only if the human being living to senescence is "laying by" what he and she shall want and need most, namely, manliness and womanliness. In fact there are no illnesses or character disorders of senescence itself, as there are no such accumulations from a well-spent life. If we grow falsely old in the only way possible, by denying responsibility for our accumulating self-experiences, we suffer a form of habit deterioration, but let us not call that "old age." We have been learning to renounce the chronological prefixes to our disease entities, such as "senile" psychosis, "senile" dementia, et cetera. Da Vinci counseled, "In youth acquire that which may requite you for the deprivations of old age; and if you are mindful that old age has wisdom for its food, you will so exert yourself in youth, that your old age will not lack sustenance."

In his essay "On Old Age," Cicero has Cato reply to Scipio's admiration for Cato's carrying his advanced years as no burden, "Your admiration is easily excited, it seems, my dear Scipio and Laelius. Men, of course, who have no resources in themselves for securing a good and happy life, find every age burdensome. But those who look for all happiness from within can never think anything bad which nature makes inevitable." And later on, "Again, all things that accord with na-

**The old are not alone in this inequality. We consider youngsters old enough to die for their country whom we consider too young to vote.

†It is healthy to learn to differentiate between two ways of speaking of "self:" one, imposture, referring to a *part* of man's interests "taking him over," as when he is popularly described as "selfish;" the other, genuine, referring to the entire person, as when his individuality is observed to comprehend all of his human being.

ture are to be accounted good. But what can be more in accordance with nature than for old men to die? Accordingly, the death of young men seems to me like putting out a great fire with a deluge of water; but old men die like a fire going out because it has burnt down of its own nature without artificial means. Again, just as apples when unripe are torn from trees, but when ripe and mellow drop down, so it is violence that takes life from young men, ripeness from old. This ripeness is so delightful to me, that, as I approach nearer to death, I seem as it were to be sighting land, and to be coming to port at last after a long voyage."

If the individual has some good fortune in cultivating awareness of his self-development, there is a stabilizing and strengthening effect that comes on "with the years." All of this beneficial effect of one's personality development depends certainly on this one specific direction in which he is growing. Hence it is that we have as many different descriptions of the nature of old age as we have individuals varying in their developed self-insight.

Freedom's road is the way to an enjoyable old age. We strike the chains from the years ahead when we heed the thought of our great emancipator, "I desire so to conduct the affairs of this administration that if at the end, when I come to lay down the reins of power, I have lost every other friend on earth, I shall at least have one friend left, and that friend shall be down inside of me."‡

It is our task as physicians to represent these ideas within ourselves, to see all of our life within ourselves. To the extent that we thus "see straight," we avoid misconduct of our organs, such as high blood pressure, cancer, "coronary," as well as so-called "accidents." Illness is the surest predictable outcome of *not seeing* all of living within ourselves, of betraying ourselves, claiming that our own life is outside somewhere, has nothing to do with us. Thus we dispossess ourselves, creating within ourselves wild mental areas.*

How to live the profession of a physician in such a way that, despite the fact we are suffering from the buffetings which come from placing ourselves around the circumstances of illness, we can uphold our ideas of self-help, self-betterment—that is our "big idea." How can we begin with infants and children and live with them as individuals so that they will be self-respecting also when they are older? We are born and remain individuals, each one separate, and each one a unit, and if that fact of our individuality can be prized for the great overall truth that it is, then our mental health, strength and development are assured. There is only one way in which full self-respect can be cultivated, in our experience, and that is by way of reverence for the dignity of *all* of one's own individuality. Insight, seeing within, is our only kind of clairvoyance, and it improves with age.

Blinding illusion number nine supports the practice of the self-deception that "Time, the grim reaper" deprives us of the possession of our most

‡Abraham Lincoln, "Reply to Missouri-Committee of Seventy," 1864.

*The writer is conducting medical research at a small hospital called McGregor Center, A Hospital for Rehabilitation and Health Education. The patients are of the general practice kind. We operate as a training center for our Wayne University medical students, and also intend using our facility in training of nurses. Our orientation at McGregor Center is a simple one, common to all physicians, of being devoted to the betterment of our own health so that, in our therapeutic efforts, we can avoid that awful situation many of us parents fall into with our children, "Don't do what I do, but do as I say!" In no degree do we wish to depreciate the best one can do, however. If criticism seems to get into our orientation it is not through any conscious intention. Accusation is always a case of the pot calling the kettle black—always. We try to beware the danger of "name calling" which lurks in our need for diagnoses in all instances, including our need to see ourselves as old, selfish and alone. Our old medical "doctrine of signatures" is best renounced. This medieval doctrine of the health and disease significance of names does appear to hold some application to one's own name, as if each of us tends unconsciously to live up to what he has observed his name to stand for.

At McGregor Center our prescription is easily put down, but there is nothing else easy about it. Not in any sense is it an arcanum: *To ignore selfness is to neglect health.* This healthy self-orientation is not just an abstract philosophy but rather a concrete *feel*osophy, based upon the observation of immediate self-experience. The blind illusion of "otherness" is the essence of the force of illness, the stagnation of the imagination, the obstruction of vitality. It develops the illusion of being a "nobody," rather than the truth of being a "somebody," of amounting to all one really amounts to. In an environment of people sick from restricting their imagination, the patient's perceptions exercise his faculty of neglecting his health. Conversely, hospital personnel who are "looking out for themselves," who have made this discovery of "What is good for themselves," furnish a strengthening curative kind of environment. Awareness of one's healing meanings of well being, works the only miracle in the way of cure. The duties of our hospital personnel are to provide the wherewithal for this "miracle" by strictest devotion to the best interests of our several selves. We aim systematically to treat our patient as our self, thus methodically creating a reciprocity, a health medium in which our patient must treat his physician as his self. A true distinction between physician and patient would be that the physician has both the stronger intention and the greater means to improve his own health. A patient may be described as a man who has not yet discovered his best health interests.

cherished relatives and friends.** We can lose *our* loved ones solely by our death, but not by theirs. In our advanced years we may often hear ourselves expressing the blind illusion that we are losing more and more of our dear ones. In truth the beloved may end his life for himself alone, but not for us. All of his meaning for us continues alive as long as we do. We must suffer the blind illusion of losing our departed friend if we enjoyed only the blind illusion of gaining him in the sense of captivation in the first place. Every one of us has but one way to prevent his being deserted, and that way is not to abandon his self. We physicians have many experiences with our patients who must accomplish extra mourning work because they never had succeeded in discovering their departed's full meaning within themselves. Our capacity to love, if used well, leads to our awareness of increased self-possession, otherwise it demoralizes us. Such insight helps us to observe the deep sense in St. John's report of the wholesome parting of Jesus from the last supper where he indicated that, unless he went away, the spirit of the truth, the comforter, would not come to those remaining. We must, if we will grow well, labor with studied ingenuity to ascribe to our own human being all that we be*hold*. In no other way can our developing self, i.e., our soul, be discoverable and pathological separation reactions of desertion be prevented. Otherwise "departing" truly entails a grief whose balsam never grew.

We can but gain increasing self-possession the longer we live, not lose it, although our awareness of our adding to our human greatness rarely corresponds with its extent. Our consciousness of the extent of our increasing self-domain, the apocalypse of man, is a function of our continuing mental integration. It depends upon the stage to which we have developed in observing the center and circumference of our gravity and levity within the confines of our own individual selves, within that holy land of our own imagination. Each one of us can recognize his ever-present self-possession provided that he can keep his wits *about him*. Free men are free also insofar as they enter into circumstances around which enslaved men can liberate more of their own greatness.

Let us consider how our grand medical statement of self-integration is effective in our treatment of grieving over a sense of loss. Those of us suffering from our repudiated self-possessions are particularly prone to misuse our wonderful human capacity for the feeling of grief. It is quite as though we are forced to concentrate so much upon the feeling of loss that our awareness of our capacity to feel benefit is contracted to a minimum. Thus Achilles tried to help his Patroclus, "Why are you in tears, Patroclus, like a young girl?" Achilles then goes on to ask whether Patroclus is unaware that so many of his great companions are among the living, implying that if all were dead then we might greatly grieve. It does appear that Thoreau had the right of it when he observed "Nothing can rightly compel a simple and brave man to a vulgar sadness. While I enjoy the friendship of the seasons I trust that nothing can make life a burden to me. The gentle rain which waters my beans and keeps me in the house today is not drear and melancholy, but good for me too."

Grieving is a natural primitive reaction to the blind illusion of loss. To devote ourselves to it beyond this meaning is to seek vitality in a graveyard. Once we can help ourselves to see that our grief can have nothing to do with anything except our own self we have the light which reveals our being overcome by our grief as the child crying bitterly and thus giving way to hurting himself. Our general health is always abreast of our self-observation. When we use every function of our mind as a function of our mind we have the right perspective which permits our taming and training our wild feelings by observing that they are wonderful signs of *life,* not death, and are entirely contained within our several selves. Melancholia which may be accurately described as inordinate concentration upon our valuable feeling of depression is a sickening habit. The quickening hopeful attitude is the medical one. The most we can accomplish in bearing the truth of death with manly and womanly dignity is to revere our apparent losses with cheerful good sense and thus make the best of the world in which we find ourselves. Once self-observation is made the basis of our health science all becomes factual, but not before, howsoever little this idea satisfies those of us who want our thinking done for us. We find health in Homer's observation "They heal their griefs, for curable are the hearts of the noble."

**All of these illusions may be described as "blinding" to indicate that they constitute natural healthy mental material only if they can be attended by the insight that they *are* illusions.

Our students frequently ask how we might help the child to understand the meaning of death. Are they not asking us how to support dismal views with veneration? Are they not saying to us that they find their own thoughts and feelings about death to represent a perilous topic and that they, therefore, recognizé their need to integrate the meaning of death in their own mind? Few of us care to realize that our apparent "bone and sinew," much less our present mental materials, are reproductions of earlier ones long since replaced.

For most of us the lack of human kindness to kindle kindred affection of our conception of death seems to be traceable to two primitive needs, (1) to make something out of nothing, and (2) to make nothing out of something. The one of us who can live himself most fully can trust himself most safely with ideas and feelings related to death. Why most of us are so greatly frightened at the idea of death is that it reminds us of the way in which we are living, not of death at all. Our one human error, our one demoralization to which all others are reducible, is blindly to claim for ourselves better mental health than we have. When we learn to ask ourselves freely, "What is the matter with me?" it does necessitate our renouncing our diagnosis of being in blooming health. The prominence of the feeling of immortality in youth has been remarked by William Hazlett as a procrastination of considering "the final payment of our great debt to Nature." But surely that debt is the greater the longer we live, and hence it is readily understandable, at least in part, that we oldsters are more apt to heed our greater obligation.

Growing old is most accurately defined as a continual coming to life. G. K. Chesterton writing on the pleasures of aging noted that one must live long in order to be able to see that the old proverbs are living truths instead of dead records. He observes also that the younger generation must always lack the sense of proportion upon the latest word which the perspective of former times can give only to the older generation.

Our community would show only a prudential kind of foresight if it were to develop a program heedful of the new developments in public health secondary to increased longevity in our country. Every community needs senescent guidance centers just as it needs child guidance centers. Also, clubs for old people have proven extremely practical.† They are now operating with success in Philadelphia where there are 172,000 persons over sixty-five years old. Especially in heavily populated areas our state and county medical societies have been setting up geriatric committees which are most co-operative in integrating wholesome hospital, home and wider community efforts.

Two health safeguards for human beings are a busy life and a home to live in. To guarantee health, every age of man requires fit work and surroundings. Long renewed opportunity for living is necessary to enable the insight that each one of us can take upon himself only a human part of his otherwise overwhelming world; that each of us consciously or unconsciously retires from all around him except the bit he can stand. In this seldom considered respect each one of us lives the monasterial life but only the oldster ever comes to view his lifelong voluntary and involuntary confinement clearly. In every metropolitan area there is an increasing need for healthy happy homes for elderly people requiring suitable place to live and carry on their activities self-respectfully, without having to resort to a hospital kind of living.‡

To summarize and conclude this health prescription of steady devotion to the newness, nowness and oneness of all life, the progressive health history of man can be traced by his successive stages in acknowledging his self-development, his highest health generalization being, "I am my own everything and everybody, and my neighborhood is the better because of my self insight." Thus we emancipate ourselves from the blind illusion of

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†Three such "Golden Age" clubs are now operating in our community of Highland Park, Michigan, as a part of our adult education effort. Our teachers help our older people to the club center for work and play and see them home at the end of the session.

‡A beginning might be made in organizing this kind of project by finding five or six adequately gifted women with whom the general idea of a progressive kind of home living for older people strikes fire. These several carefully screened workers could then be exposed to an expert in home planning whereby their inspirations might be implemented with related home building instructions. At the same time it would be well to have the same home makers working with a group leader whose function it would be to represent human development and integrity as it applies specifically to those of us who have plied our youth the longer time. After these home centers are established it is most important that active in-service training of the home builder's appreciation of the wonderfulness of *human being* constitute a requirement of his continuing service. Please see the helpful study "Health Requirements of the Aging Population," Warren B. Cooksey, M.D., J.M.S.M.S., 51:560 (May) 1952.

Spontaneous Rupture of the Inferior Epigastric Artery

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RUPTURE of the inferior epigastric artery with spontaneous hemorrhage into the rectus abdominis muscle or between the muscle and peritoneum is rare. Strenger, in his paper, gives three cases and states that Cullen saw only five cases in all of his thirty years of practice. In a review of the literature in the last twenty years, less than fifteen actual cases of rupture of the inferior epigastric artery have been reported.

Anatomy

The inferior epigastric artery arises from the medial side of the external iliac, about one-fourth inch above the inguinal ligament. For a short distance it passes medially between the inguinal ligament and the lower border of the deep inguinal ring, lying in the extraperitoneal fatty tissue. It then changes its course and passes upwards and medially lying close to the medial side of the deep inguinal ring. On arriving at the lateral border of the rectus abdominis, at a point about midway between the upper border of the symphysis pubis and the umbilicus, it pierces the fascia transversalis and ascends within the sheath over the arcuate line. It then changes its course and ascends vertically between the muscle and the posterior wall of the sheath as high as the umbilicus. Here it enters the muscle and about two inches above the umbilicus ends in its terminal branches which anastomose with branches of the superior epigastric artery. The inferior epigastric lies at first in the preperitoneal areolar tissue, having the parietal peritoneum on its deep surface and the fascia transversalis superficial to it. Shortly after passing the deep inguinal ring the vessel pierces the fascia transversalis and in its course to the lateral border of the rectus forms the outer boundary to the inguinal (Hesselbach's) triangle. As the vessel turns from the lower border to the medial side of the deep inguinal ring it has the spermatic cord in front of it and the vas deferens hooks round its lateral side. The course of the vessel in its first or oblique part is indicated by a line from the medial border of the deep inguinal ring to the lateral border of the rectus abdominis at a point about midway between the umbilicus and the superior border of the symphysis pubis. The course of the second or vertical part of the vessel is represented by a line corresponding with the center of the rectus and about one and one-half inches from the linea alba.

Etiology

The immediate cause of a rupture may be slight exertion such as coughing, straining, moving about, but very seldom trauma. At times there may be degeneration of the vessels themselves with subsequent rupture. Rupture of the inferior epigastric vessels may be seen in pregnancy. However, in most cases one fails to elicit any history of a foregoing cause.

Diagnosis

Usually the earlist and most constant symptom is pain. Pain is usually located in the area of the ruptured vessel. The degree of pain is in proportion for the most part to the size of the resulting hematoma caused by the rupture. Ecchymosis of the skin is present, but a duration of three days will ensue before its appearance. A mass in the area of the rupture is usually found. Tenderness is present in most cases. The hematoma may be large enough to protrude into the peritoneum downward to imitate a pelvic tumor. This occurred in one of our cases.

Treatment is usually excavation of the hematoma, control of bleeding points, obliteration of dead space and means to combat infection secondary to injury.

Case Report

Case 1.—The first case to be presented is one of Mrs. J. F. This patient entered the hospital on September 17, 1951, on the surgical service. The patient gave a history at that time of an acute upper respiratory infection with a severe cough developing approximately two weeks prior to admission, and following a severe coughing episode the patient noticed pain in the left lower quadrant of her abdomen and also a discoloration of skin around an old previous midline incisional scar. Patient stated that she had lost six pounds in the past two weeks and that she had some frequency of urination during the past several days. She had no other particular symptoms referable to her present illness.

The past history by systems was essentially negative. She had had no previous symptoms or signs that may be

attributed to the urinary tract. The patient stated that her last menstrual period was in 1944, practically seven years before her entrance. She was a Para II, Gravida II.

Her surgical history consisted of a hysterectomy and appendectomy.

The medical history was essentially negative.

The family history was non-contributory.

The physical examination revealed a well-developed, well-nourished, slightly obese, white, fifty-five-year-old woman in no acute distress. Blood pressure was 118/110 mm. Hg; temperature 98.6; and respirations 18. Examination of the head and neck were within normal limits, as was the examination of the chest. The main physical findings in this examination were found on the abdomen. For two or three centimeters on either side of an old midline scar in the lower half of the abdomen there was evidence of subcutaneous hemorrhage with discoloration of the skin. The skin around the incision was blue to purplish in color. There was a hard, firm immovable mass which was irregular in outline and approximately the size of a large orange palpable in the left lower quadrant of the abdomen. There was only slight tenderness to palpation in that region. The rectal examination was within normal limits. The pelvic examination revealed external genitalia normal, vaginal mucous membrane atrophic, the floor was relaxed, the cervix was clear, the corpus was absent. There was a hard, fixed, round, non-tender mass high in the pelvis or the left lower quadrant of the abdomen. Extremities were normal. No adenopathy was palpable and the reflexes were physiological. The impression of the attending surgeon at this time was a left ovarian tumor.

The laboratory report showed a leukocytosis of 12,500. The differential was within normal limits. The red blood cells and hemoglobin were within normal limits. The Kahn was negative. The urinalysis was within normal limits. A barium enema was negative for demonstrable colon pathology.

The patient was taken to surgery with the diagnosis of a left ovarian tumor. Under sodium pentothal, nitrous oxygen and ether anesthesia, a midline incision was made through the previous incisional scar in the lower midline in the anterior abdominal wall. The incision was extended down to the peritoneum, the peritoneum was grasped with mosquito forceps and opened by sharp dissection. Manual and visual exploration of the pelvis revealed normal ovaries, normal adnexa. The uterus was absent due to a previous hysterectomy. The peritoneal-anterior wall on the left side was noted to be bulging into the pelvic cavity. Exploration laterally to the left in the anterior abdominal wall revealed a large hematoma between the posterior surface of the rectus muscles and the posterior rectus sheath and the transversalis fascia and the peritoneum. This hematoma was approximately six or seven centimeters in diameter. An incision was then made through the anterior rectus fascia and approximately 75 cc. of dark red blood and dark red blood clots were expressed through this incision. A smaller incision was made in the rectus sheath over the left rectus muscle and a drain inserted. Before this was done, the area of the inferior epigastric artery was ligated. The anterior abdominal wall was then closed in a routine manner. The postoperative diagnosis was a rupture of the inferior epigastric artery with a resulting hematoma into the anterior lower abdominal wall.

Following this procedure the patient made an uneventful recovery and was discharged on the seventh postoperative day.

Case 2.—The second case presented was Mrs. A. B., who entered the surgical service of this hospital on January 19, 1952. She gave a history of pain in the lower left quadrant for the past three months with an associated enlargement of the abdominal girth. Menses had ceased two years previous to entry. She has experienced no weight loss, no urinary symptoms. She stated that the only thing that she had noticed was that her girth had enlarged around this mass in her left lower quadrant along with pain.

The past history revealed that she had had no previous surgery.

Her medical history revealed that in 1940 she had an onset of low back pain radiating up into her hips, and the pain had progressively radiated down past the aspect of leg to ankle. This had been diagnosed as arthritis.

Family history was essentially negative.

Physical examination revealed a well-developed, well-nourished, white woman in no apparent distress. Blood pressure was 120/80 mm. Hg; temperature, 98.7° F., and respirations, 16. Skin, head and ears, nose and throat were within normal limits. The adnexa was within normal limits. Chest, heart and lungs were all within normal limits. The breasts were negative. In the lower left quadrant of the abdomen there was a mass extending to the midline up through the umbilicus, markedly tender. The back revealed tenderness over the fifth lumbar. The extremities were within normal limits. There was no adenopathy and the reflexes were within normal limits. The pelvic examination at that time revealed a mass palpable in the lower left quadrant with tenderness present, which was impossible to outline directly. The perineum revealed a slight cystocele and rectocele. The uterus was in an anterior position, movable but not without pain when palpated. The left adnexa was distended by a large cystic mass approximately 10 cm. in diameter. The cervix was slightly eroded. The impresison at that time was an abdominal mass probably left adnexal in origin.

The laboratory work of this patient was all within normal limits. A barium enema was done and it was concluded that the colon was negative for demonstrable pathology but an extra-alimentary tumor was present in the left lower quadrant.

With a preoperative diagnosis of ovarian cyst or hematoma of the abdominal wall, the abdomen was opened. This being the second case with a similar type of findings, hemorrhage from the inferior epigastric artery was suspected.

Under sodium pentothal and nitrous oxide anesthesia, the patient was prepared and draped in the usual man-

ner. The abdomen was opened through a lower abdominal midline incision with the right rectus compartment being entered. The extraneous tissues were excised. There was a purplish discoloration of them indicating that there was a hemorrhage of the abdominal wall. The right rectus compartment was inspected, but evidence of further hemorrhage was not here. The left rectus compartment was then entered and a rent in the left rectus muscle extending practically two-thirds through its entirety, was discovered. The peritoneal cavity was opened through the right rectus compartment. The appendix was then isolated and removed. Definite bleeding points could be isolated in the left rectus muscle and the posterior rectus sheath. These were ligated. An oxycel pack was then inserted and after the bleeding seemed to be fairly well controlled a rubber drain was also inserted in the region of the oxycel. The rectus muscle was then sutured down to the midline at either side, the fascia was closed with continuous sutures of chromic No. 2-0 and the subcutaneous sutures were plain No. 0 catgut. The skin was closed with interrupted mattress sutures, a dressing was applied. The patient withstood the procedure well and left the operating room in good condition. Here again, the source of the hemorrhage was the inferior epigastric artery.

The postoperative course was uneventful and the patient left the hospital on the eighth postoperative day.

Conclusion

1. Spontaneous rupture of the inferior epigastric artery without trauma occurs.

2. Etiological factor in both cases was a respiratory infection with cough.

3. The subcutaneous ecchymosis is a late sign because of the muscle and fascia through which the blood must penetrate before becoming subcutaneous.

4. Pain, subcutaneous tumor-like pelvic mass and ecchymosis, are the cardinal symptoms.

5. The surgical therapy is discussed.

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3925 Joy Road

ARTHRITIS AND GERIATRICS

(Continued from Page 508)

Conclusions

The great majority of elderly patients have poor posture which often is the cause of or accentuates rheumatic disabilities. Regular exercises is advised to keep joints functioning properly and also to stimulate peripheral circulation. Osteoarthritis is common in elderly people and responds fairly well to physical therapy, preferably a Hubbard tank, and occasionally the use of corrective orthopedic surgery to the hips or knees is of great value. Be suspicious of any acutely painful and swollen joint —in men or women—it may be gout!

Bursitis is increasing in frequency; treatment of bursitis of the shoulder involves the use of deep x-ray therapy, physical therapy, or orthopedic surgery. ACTH or Cortisone should be used with great discretion in the elderly patient. A warm, dry climate is of great benefit to all older individuals with musculoskeletal disabilities. Correction of anemias and vitamin deficiencies are an essential adjunct to therapy.

UPON CONSIDERING MY AGE

(Continued from Page 531)

unself which killeth and become physician of the self which maketh alive. Your scribe, whose age at least entitles him to have considerable authority, may agree with Cicero that the composition of this work "has been so delightful, that it has not only wiped away all the disagreeables of old age, but has even made it luxurious and delightful, too."

1512 St. Antoine Street

St. Luke's Hospital Clinico-Pathologic Conference

Edited by J. C. Smith, M.D.
Saginaw, Michigan

THE PATIENT was a white woman, twenty-seven years old, who was well until two months before hospital admission. At that time, she developed pain in the right infrascapular region that radiated to the right shoulder. This pain was accentuated by coughing and by deep inspiration. Three days later, she also developed epigastric pain that was associated with slight nausea. Radiographic examination of the chest was normal. Further studies revealed a small gall bladder in which concretions were not seen. Function was stated to be normal although it was noted that only a small amount of dye entered the gall bladder. Radiographic examination of the gastro-intestinal tract, done elsewhere, was interpreted as showing an ulcer of the duodenum. The patient was given a Sippy diet and there was some improvement.

About three weeks later, pain developed in the lower abdomen and in the right upper quadrant. The pain was constant and steadily increased in severity. This was associated with nausea, vomiting, and slowly progressive distention of the abdomen. Slight jaundice was first noted at this time and the discoloration became progressively more pronounced. One month after onset of the abdominal pain, a pelvic tumor was discovered and the patient was admitted to the hospital. During the past two months, there had been progressive weakness and weight loss of about 30 pounds.

Review of systems elicited no other complaints.

The past history disclosed that the patient had completed a normal pregnancy with birth of a baby boy, by uncomplicated labor, five weeks before the onset of the present illness. It was also learned that a radical mastectomy had been performed for carcinoma of the right breast four years before the present illness. The tumor measured 2.5 cm. in greatest diameter, and was in the central portion of the breast. No metastases were found in several lymph nodes. After this operation, the patient was given twenty x-ray treatments and physical examination, every six months during the past four years had revealed no recurrence.

Physical examination revealed an acutely ill, semicomatose white woman complaining of severe pain in the abdomen. The temperature was 99.0 degrees (F.), respirations 28, pulse 110, and blood pressure 100/70 mm. Hg. The skin and sclerae were moderately icteric. The head and neck were normal. The right breast was absent and there was a large, soft scar in that region. The left breast was normal. No lymph nodes were palpated in either axilla. The lungs were clear to auscultation and percussion. The heart was not enlarged, the rhythm was regular, and no murmurs were heard. The abdomen was distended and soft. Shifting dullness and a fluid wave were elicited. The liver margin, 6 cm. below the right costal border, was smooth, firm, and nontender. There was tenderness in the epigastrium and suprapubic region. Pelvic examination revealed a firm, oval, and freely moveable mass in the region of the left ovary, that was estimated to measure about 10 cm. in diameter. The uterus was displaced to the right and was stated to be subinvoluted. There was slight pitting edema of both lower extremities. Neurologic examination was normal.

The urine was cloudy, reddish brown, acid, and of specific gravity 1.015. The urine contained bile and uric acid crystals and the sediment revealed twenty leukocytes and forty epithelial cells per high power field. Hematologic examination revealed 13.6 grams of hemoglobin per 100 cc. There were 4,200,000 erythrocytes and 9,200 leukocytes per cu. mm. Differential count of 100 cells revealed sixty-nine segmented granulocytes, twenty-eight lymphocytes, and three band cells. Bleeding and clotting times were normal. The Van den Bergh test was direct, prompt, and indirect, 46.9 mg. per 100 cc. The serum alkaline phosphatase was 9.2 Bodansky units. The prothrombin time was 75 per cent of normal. Cephalin flocculation was negative and thymol turbidity was 1 plus. Radiographic examination of the chest was normal. A flat plate of the abdomen revealed only moderate distention of the colon and slight evidence of ascites. Paracentesis yielded 675 cc. of clear, pale yellow fluid from which a portion, on microscopic examination, disclosed no tumor cells. The jaundice was progressive and the patient became rapidly worse and died on the tenth hospital day.

Discussion of Case

Dr. Wm. B. Kerr:—In this case, we have a twenty-seven-year-old, white woman who was well until about two months before admission to the hospital. Four years previous to that time, she had had a malignancy of the right breast, removed by radical mastectomy, after which there was no clinical evidence of metastasis. In addition, an adequate course of deep x-ray therapy was given. She was then well until the present illness except for pregnancy with normal delivery five weeks before the onset of complaints. Her early complaints appear referable to the organs below the diaphragm with radiation of pain to the shoulder. Soon after this, progressive jaundice developed. The direct Van den Bergh test was prompt and the quantitative serum bilirubin was 46.9 mg. per 100 cc. Thymol turbidity and cephalin flocculation were normal. This indicated obstructive jaundice without diffuse hepatic disease. In addition, ascites developed suggesting some degree of portal obstruction. Lastly, there was subinvolution of the uterus, and a tumor, apparently of the left ovary.

With these essential findings, several diagnoses are to be considered. The uterine enlargement with rapidly progressive course occurring shortly after pregnancy, are consistent with chorioepithelioma. However, pulmonary metastases are expected and we do not have an Ascheim-Zondek test which would be most helpful. Carcinoma of the head of the pancreas often produces massive hepatic metastases with portal obstruction and short progressive course. The patient was only twenty-seven and had had one malignant tumor. To consider a second primary tumor at this age is, in my opinion, unwarranted. For the same reasons, I am reluctant to think that the

Clinical discussion by William B. Kerr, M.D.



Fig. 1. Metastatic carcinoma of left ovary.



Fig. 2. Metastatic carcinoma of liver.

ovarian tumor was a second primary carcinoma. I shall exclude diffuse hepatic disease such as yellow atrophy or viral hepatitis on the basis of normal liver function tests. There is also the possibility that the ovarian mass was a Krukenberg tumor. However, the gastrointestinal tract was normal by radiographic examination except for the duodenum. Here, the clinical evidence is inconclusive and this is an unusual site for carcinoma, particularly at the age of twenty-seven years. This leaves latent metastatic carcinoma of the liver and left ovary that was activated by the hormonal changes of pregnancy. The difficulty with this diagnosis is that there are no demonstrable metastases in the lungs or in the cervical, axillary, or mediastinal lymph nodes. I would very much expect these lesions to be present. Nevertheless, this diagnosis calls into consideration only one disease, and pregnancy is known to stimulate the metastases of carcinoma of the breast. Therefore, the most likely clinical diagnosis is, in my opinion, metastatic carcinoma of the breast affecting particularly the liver and left ovary.

Visitor:—It seems to me that this patient had been cured of her breast tumor. The carcinoma was small, sections demonstrated no axillary lymph node metastases, she was given twenty x-ray treatments, she was in good health for four years, and the chest plate showed no pulmonary metastases as late as ten days before death. I believe she had a second primary carcinoma arising in the left ovary with abdominal and hepatic metastases.

Dr. H. T. Caumartin:—In most cases, a five-year survival is a reasonably good index of cure for a malignant tumor. However, in carcinoma of the breast, metastases may not appear for many years after apparent cure. I do not think that the negative chest x-ray and the four-year period of apparent good health should necessarily disfavor a diagnosis of metastatic tumor.

Dr. Kerr:—In the clinical decision here, between metastatic tumor and a second primary carcinoma arising in the ovary, it seems to me that the known adverse influence of pregnancy on breast cancer should be the deciding factor. Thus, I would exclude primary ovarian carcinoma.

Dr. Kerr's Diagnosis

Metastatic carcinoma of the breast with involvement of liver and left ovary.

Anatomic Diagnosis

(1) Metastatic undifferentiated carcinoma of left ovary, liver, gall bladder, pancreas, pancreatic lymph nodes, and upper lobe of left lung. (2) Absence of right breast. (3) Bronchopneumonia, lower lobes of right and left lungs.

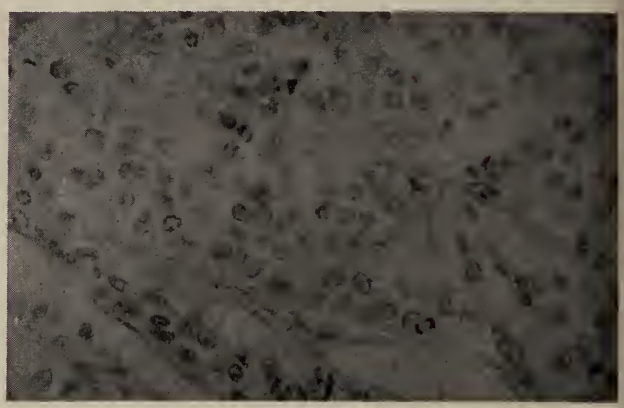


Fig. 3. Microsection of left ovary showing undifferentiated carcinoma.

Dr. J. C. Smith:—The metastatic lesion of the left ovary was represented by a large, smooth, firm and solid tumor that was freely moveable. (Fig. 1) Interest in this case centers about this type of ovarian metastasis as reports of similar cases are uncommon. The other pelvic structures were essentially normal. There was extensive involvement of the liver by metastatic tumor. (Fig. 2) In view of this, it may seem unusual that the thymol turbidity and cephalin flocculation were normal. However, it is known that slight diffuse hepatic disease is often reflected by marked reduction of liver function whereas extensive focal disease frequently leaves sufficient parenchyma to maintain normal function. The amount of parenchyma necessary for this may be surprisingly small as we see here. An ulcer of the duodenum was not found. Death is attributed to pronounced bronchopneumonia of the lower lobes of both lungs.

In 1951, Karsh[1] reported a review of 10,287 autopsies that included 158 carcinomas of the breast. In eighteen of the latter, there were ovarian metastases. Both ovaries were involved in eleven, and in nine there was enlargement. In eleven, the histologic type of secondary tumor was undifferentiated carcinoma. Other sites of primary tumor from which there were ovarian metastases included cervix, thirteen; colon, ten; stomach, eight; uterine fundus, six; and lung, two. Karsh pointed out that in this series, the ovary was involved by metastatic tumor more often from the breast than from any other single organ. He also noted that the breast so involved the ovary as frequently as all primary tumors of the

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Detroit Physiological Society

MEETING OF JANUARY 15, 1953

Studies on the Physical Chemistry of Bone Salt Formation

Roderick P. MacDonald
Wayne University College of Medicine

Inorganic precipitates and their supernatant solutions, having compositions similar to bone and serum ultrafiltrate, respectively, were prepared by equilibration of salt solutions under physiological conditions. On the basis of theoretical consideration, the following equation was derived for the expression of the relation of the composition of the precipitates to their supernatant solution.

$$\frac{[CaCO_3]_p}{[Ca_3(PO_4)_2]_p} = K\,[\log (CO_3^{=}) - 0.2 \log (Ca^{H}) - 0.8 \log (PO_4^{\equiv})]_p$$

When the conditions of equilibration were altered by varying the ratio of calcium to phosphate, the bicarbonate concentration, adding magnesium, or changing the pH of the supernatant solution, the relationship was found to hold. Commercial calcium phosphate (which also contained carbonate) was equilibrated under similar conditions for a suitable period of time, and the analytical data were substituted into the equation. A straight line relationship existed. Mixtures of commercial calcium phosphate and calcium carbonate were equilibrated and found to give similar results. Thicalcium phosphate was prepared and equilibrated, but this salt did not adjust itself to the composition predicted by the equation. It is suggested that this may be due to a different crystal structure. When various amounts of this tricalcium phosphate were added to equilibrating mixtures which would normally form precipitates agreeing with the equation, the precipitates failed to reach the appropriate composition. The degree of deviation depended upon the quantity of tricalcium phosphate added.

Analytical data for bone and plasma were available for different age groups, and substitution of these data into the equation resulted in a straight line relationship comparable to that obtained through the *in vitro* studies.

Laboratory Observations on Parahemophilia and Proconvertin Deficient Plasmas

J. Frederic Johnson, and Walter H. Seegers
Wayne University College of Medicine

For the investigation of the blood clotting mechanisms it is often of strategic advantage to utilize pathologic plasma or purified coagulation components. In this study we used both. Plasma from patients with proconvertin deficiency and also from parahemophilia (Ac-globulin deficiency) was made available to us through the courtesy of Professor Paul Owren of Oslo. Purified prothrombin was made in our laboratories by techniques previously described.

The quantitative analysis for Ac-globulin used in this laboratory requires purified prothrombin as the substrate. As indicated by Table 1, analysis showed that the Ac-globulin deficient plasma did not contain any Ac-globulin. This is in accord with the quantitative aspects of Owren's experiments and is the first direct confirmation of the generally accepted view that factor V and Ac-globulin are the same factor. By adding a concentrate of proconvertin (material of serum adsorbed on $BaCO_3$ and eluted with sodium citrate) to parahemophilia plasma there was still no Ac-globulin found upon analysis; however, a platelet extract similarly added to the plasma did show some Ac-globulin. This latter result is due to the presence of an Ac-globulin-like substance in platelets.

TABLE I. AC-GLOBULIN ANALYSES IN UNITS PER ML.

	Nothing added	$BaCO_3$ eluate added	Platelet extract added
Proconvertin deficient plasma	1-2	12	11
Ac-globulin deficient plasma	trace	trace	1-2

The quantitative Ac-globulin analysis of the proconvertin deficient plasma (Table I) indicated that it contained less than two units of Ac-globulin

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Editorial

HELP MAKE A 3,000 ATTENDANCE RECORD IN GRAND RAPIDS
MICHIGAN STATE MEDICAL SOCIETY ANNUAL SESSION
September 23-24-25, 1953

AMERICAN MEDICAL ASSOCIATION HOUSE OF DELEGATES

THE HOUSE of Delegates of the American Medical Association held one of its very rare special meetings in Washington, D. C., on March 14, 1953. President Eisenhower had announced his intention of reorganizing the executive branch by making the Federal Security Administration into a new Department of Health, Education and Welfare, with certain changes in the present structure, and a place in the Cabinet for the administrator, Mrs. Oveta Culp Hobby.

Being vitally interested, and twice having been instrumental in the defeat of a somewhat similar plan proposed by President Truman, the American Medical Association called a special session of its House of Delegates to meet in Washington to consider the proposal. The recommendation was sent to Congress on March 13, and contained a provision for an Associate Secretary of Health, through which office all medical matters of the entire Federal Security Administration and its six various major divisions were to be channeled. This, and a personal promise from President Eisenhower that during his term there would never be a suggestion in any way to socialize medicine, prompted the House to vote approval of the statement prepared by the Trustees as follows:

Report of the Board of Trustees on Reorganization Plan No. 1 of 1953 Adopted Unanimously by the House of Delegates on March 14, 1953

"The House of Delegates of the American Medical Association has for nearly eighty years been on record as favoring an independent Department of Health in the federal government. The reason for this stand has been that the House has felt that health and medicine should be given a status commensurate with their dignity and importance in the lives of the American people, and that they should be completely divorced from any political considerations.

"The Board of Trustees, after a careful study of the policy of the American Medical Association with respect to the administration of health activities in the Executive Branch of the government and after studying the Reorganization Plan for elevation of the Federal Security Agency to cabinet status submitted by President Eisenhower to the Congress, finds that Reorganization Plan No. 1 of 1953 provides for a special assistant to the Secretary for Health and Medical Affairs. This provision is a step in the right direction which should result in centralized co-ordination under a leader in the medical field of the health activities of the proposed department. Health, therefore, is given a special position. The proposed plan, properly administered, will permit more effective co-ordination and administration of the health activities of the new Department without interference or control by other branches.

"Previous attempts to raise the Federal Security Agency from an independent agency to the level of an Executive Department have been opposed by the Association because the plan did not meet these aims.

"Inasmuch as federal health benefits and programs are established by the Congress, an administration bent on achieving the nationalization of medicine cannot reach that goal except with the support of Congress. Therefore, an organizational plan through which federal health activities are administered, although important, is not nearly so vital an issue as the policies adopted by the Congress of the United States.

"The Board of Trustees recommends that the House of Delegates reaffirm its stand in favor of an independent Department of Health but that it support the Reorganization Plan No. 1 of 1953 as being a step in the right direction; that the American Medical Association co-operate in making the plan successful and that it watch its development with great care and interest.

"It should be understood, however, that the Association reserves the right to make recommendations for amendment of the then existing law or to press for the establishment of an independent Department of Health, if the present plan does not, after a sufficient length of time for development, result in proper advancement in and protection of health and medical science and in their freedom from political control."

For the first time in two decades, the medical profession and its official organizations have the opportunity to work with a friendly government. The representatives of the profession promised complete support, with the reservation that if the present plan does not work we shall again ask for a Department of Health, as we have for over eighty years.

Co-operation and trusting understanding may well make this arrangement an ideal one, and lead to an era of growth and effort never before experienced. We so hope and believe.

An Ounce of Prevention

Now that March is past and we have all made our report to the Bureau of Internal Revenue, and April showers and cold have given way to the balmy days of May, we may have overlooked the passing of a very important date. This, may I have the temerity to say, was the opening day of trout season! The 25th of last month may or may not have assumed importance on your individual calendar, but, if not, some date in the year should signify a turn of events that means at least a temporary putting-aside of the confining practice of medicine. Possibly trout fishing is not your means of escape, although I dare say you could do a lot worse, but some means there must be, and the closer to nature it takes you, I believe, the greater will be its reward. Perhaps the golf tee is your favorite, or possibly seeking out the wild orchid.

Albeit, my message is that the path of least resistance is to become so engrossed in the work of our profession that we are liable to overlook the stress on our own physical being and the companionable needs of our families. It has been said that the emotional stress frequently encountered by the physician in the care of his patients could be likened to that of a bank president, when a run on his bank occurs. Be that as it may, all too often one of our brother physicians is stricken with a coronary lesion, that always seems too early, and requires a reappraisal of his activity and generally a forced reduction in the stress factors in his work—Perhaps we should more often practice the dictum, "An ounce of prevention is worth a pound of cure."

President's



Message

R. J. Hubbell

President, Michigan
State Medical Society

"MICHIGAN FIRSTS"

FOR MANY years, the Michigan State Medical Society has been boasting to its members of certain "Michigan Firsts," and has pointed with pride to numerous economic, administrative, and organizational advance efforts in behalf of the Michigan public and our own advancement in prestige. We have also mentioned several "firsts" in the advanced medical thought, or introduction of something new in the field of medicine.

During the recent Michigan Clinical Institute, those who attended the program session on Friday morning, March 13, 1953, saw another "Michigan First," a movie demonstration, "Some Aspects of the Mechanical Heart," by Robert D. Dodrill, M.D., Detroit. A colored movie was shown of the first operation on a human patient, with the sidetracking of one side of the heart, the exposure of the tricuspid valves, their repair, and the closure. The human heart had been bypassed for twenty-five minutes to allow surgical repair. We are told the mortality to date is seven in nine. There are two recoveries.

Unfortunately, we cannot show a motion picture in THE JOURNAL, but the Editor was impressed by the presentation.

About a year ago, the Editor published a "First" in Medicine, "the first use of adrenalin in the treatment of asthma," and referred to the first report of mitotic figures in the circulating blood, with the suggestion the leukemias were a cancer of the blood, a concept which has now been accepted forty years after the first suggestion. We added that if any of our members know of such "firsts" in medicine that they write them up and submit them to us for publication.

Among the book reviews in the April JOURNAL is a tribute to two "firsts" by a Michigan doctor, John M. Sheldon of Ann Arbor, who recently published a new book entitled "A Manual of Clinical Allergy."

MEDICAMENTS OF KNOWN POTENCY

A FEW DAYS ago, one of our prominent Michigan pediatricians reported having some children referred to him with the notation that they had not responded to rather large doses of penicillin, and would the doctor make suggestions in the matter of treatment. The pediatrician thought penicillin indicated and proceeded to give the drug prepared by a well-known supplier. He was gratified to get prompt and satisfactory response.

Inquiry developed that the drug previously given had been supplied by distributors who buy in quantities and resell to the physician. Had the drug been on some shelf long enough to lose its published potency?

The responsibility of the Doctor of Medicine to his patient is to make sure his diagnosis is properly arrived at, and that the medication he supplies or advises is of standard potency. All drugs and medicaments which may deteriorate, if supplied by the well-recognized firms, have a date stamped on the package beyond which the potency is not guaranteed. If our members have in their supplies outdated serums, antibiotics, or other materials, they should turn them back to the manufacturer or jobber for replacement. Reliable firms are glad to make this replacement.

A FRIEND IN CONGRESS

ON MONDAY, March 16, immediately following the session of the House of Delegates of the American Medical Association, a hearing was held by the Subcommittee of the House of Representatives to discuss and consider the President's Plan Number 1. During the hearing at which Congressman Claire Hoffman, from the Fourth District of Michigan, was presiding, the question of the "powerful American Medical Association lobby" was mentioned, with the implication of its strength in compelling Congress to consider with favor topics in which the American Medical Association was interested. Mr. Hoffman said he had heard enough about "the huge 20 million slush fund" the American Medical Association had for lobbying. Was there anyone present who knew the facts? John Cline, M.D., past president of the American Medical Association, said he had the figures in his pocket, just received from the auditors. He gave them to the presiding officer.

The facts are that the American Medical Association maintains a Washington office as an information center, both for members of the profession and members of Congress. It was first established in 1943. At present, it has a staff of fifteen persons, three physicians, two editors, a lawyer, a business manager and his assistant, and an executive assistant. Two of these are registered as lob-

(Continued on Page 565)

Michigan's Foremost Family Physician Looks Ahead—Never Backward

Sherman L. Loupee, M.D., of Dowagiac, Michigan's Foremost Family Physician for 1952, is a true country doctor from the agricultural area of southwestern Michigan.



Sherman L. Loupee, M.D., Dowagiac, Michigan's Foremost Family Physician for 1952, accepts a resolution presented to him by State Representative John W. Fletcher, of Centreville. The resolution, passed by both the House and Senate of the 1953 Michigan Legislature, honored Dr. Loupee, a former colleague who served in the State Legislature from 1939 to 1949. Mr. Fletcher represents the counties of St. Joseph and Cass and holds the seat once occupied by Dr. Loupee.

While all his life Dr. Loupee has wanted to be a rural doctor of medicine in a rural community, his influence and judgment have gone beyond the rolling countryside where he has practiced medicine more than forty-eight years.

He is a long-time member of the Michigan State Medical Society House of Delegates. Currently, he is Mayor of Dowagiac. He was elected to that position last spring. This present community service is but one of the many political positions he has felt duty-bound to fill.

The veteran practitioner was named Michigan's Foremost Family Physician for 1952 by the Michigan State Medical Society House of Delegates at the 1952 Annual Session in Detroit last September. A scroll, presented by Reader J. Hubbell, M.D., Kalamazoo, President of the Michigan State Medical Society, was awarded Dr. Loupee on March 11, 1953, during the Michigan Clinical Institute in Detroit in recognition of his selection.

The eighty-year-old country doctor, who tells others "never look backward," can still in retrospect review a brilliant career of service to his fellow man.

For ten years, he distinguished himself and his medical profession while serving in the Michigan

THE COVER

Sherman L. Loupee, M.D., Dowagiac, Michigan's Foremost Family Physician for 1952, surrounded by a sampling of newspaper stories regarding the selection and subsequent honors.

State Legislature. In five consecutive terms from 1939 to 1949, he actively supported legislation, particularly in the fields of health and education. As a member of the House Committee on Health, he fought consistently to maintain the high standards of the medical profession.

He was also chairman of the House Committee on Education during his final term in the Legislature. Dr. Loupee's assistance on a special education committee was instrumental in developing a state aid bill which has been described as the most equitable state aid bill of all time.

The 1953 Michigan Legislators, sitting in joint session on March 2, honored their former colleague by presenting him with a resolution passed by both the House and the Senate.

Dr. Loupee was born September 4, 1872, at Union, Michigan. He attended Michigan Normal College at Ypsilanti and was graduated in 1899. While his first interest at that time was in teaching, he decided to become a doctor of medicine. He entered the College of Physicians and Surgeons at the University of Illinois and received his medical degree in 1904.

He first began the practice of medicine in Vandalia, Michigan, where he also found time to serve as village president and on the school board. In 1919 he moved to Dowagiac where he has continued to practice and still devotes a portion of his time as a member of the Dowagiac school board.

The octogenarian who never looks back has others who admire and respect him—others who remember the 4,800 babies he has delivered. They remember the advance of medicine he has seen from the horse and buggy days. They remember the calls he made into the country on horseback.

But Doctor Loupee looks ahead and sees a great future for medical science in the discoveries now being made and yet to be made.

DETROIT PHYSIOLOGICAL SOCIETY

(Continued from Page 537)

per ml. as compared with the normal value of 13 to 17 units. By first mixing a concentrate of proconvertin or platelet extract with the proconvertin deficient plasma it was possible to get the quantitative results for Ac-globulin content of the plasma to approach normal. Thus material adsorbed on $BaCO_3$ and eluted with sodium citrate contains very little if any Ac-globulin itself, but can enable proconvertin deficient plasma to develop its full Ac-globulin titre. Platelet extracts develop a similar titre in proconvertin deficient plasma. By contrast with these experiments our method for Ac-globulin analysis gives normal values for dicoumarol plasma without addition of platelet extract or $BaCO_3$ eluate preparation. Nevertheless dicoumarol plasma is supposed to be deficient in proconvertin.

These experiments show that our purified prothrombin preparation contains very little if any proconvertin or Ac-globulin, and point to interrelationships between Ac-globulin, platelet extracts and proconvertin not previously described. It is our view that certain current theories about the action of these three substances are not adequate. Furthermore, it is probably necessary to have these substances in purified form before their biochemical action can be described.

This investigation was supported by a research grant from the Michigan Heart Association.

ST. LUKE'S HOSPITAL CLINICO-PATHOLOGIC CONFERENCE

(Continued from Page 536)

gastro-intestinal tract combined. Remold[2] found thirty-six cases of breast carcinoma occurring during or before pregnancy, in a review of 2,455 cases of breast carcinoma treated from 1918 to 1950. He emphasized that pregnancy incites an adverse effect on carcinoma of the breast, and recommended that all cases be treated promptly, and that even after a long well period, pregnancy is not without danger. He recommended that castration by x-ray be performed in all such cases. Siegert[3] reported on 607 cases of carcinoma of the breast in which 347 were castrated by x-ray and 260 were not. There was an average delay of 1.3 years in the clinical appearance of metastases in the castrated series as compared with the non-castrated series. Siegert recommended that castration be performed in all cases of carcinoma of the breast if the patient is still in the active menstrual period.

References

1. Karsh, J.: Secondary malignant disease of the ovaries; study of 72 autopsies. Am. J. Obst. & Gynec., 61:154, 1951.
2. Remold, F.: Mamm-Ca und Schwangerschaft. Strahlentherapie, 87:65, 1952.
3. Siegert, A.: Kastration und Mamma-Ca. Strahlentherapie, 87:62, 1952.



Childhood constipation deserves treatment which gently restores normal peristaltic movements; drastic elimination cannot permanently correct the condition and may be harmful to the child.

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SEARLE Research in the Service of Medicine

Michigan's Department of Health

Albert E. Heustis, M.D., Commissioner

GAMMA GLOBULIN ALLOCATED FOR MEASLES

The Office of Defense Mobilization has announced that the basic allocation of gamma globulin to Michigan for the prevention of hepatitis and the prevention and modification of measles for 1953 will be 60,900 cc., or 30,450 2 cc. vials. This figure was arrived at by arbitrarily choosing the median year during 1947 through 1951 and multiplying this figure by 3 cc. The median year for Michigan during this period happened to be 1949 when 20,279 cases of measles were reported. The 60,900 represents this figure multiplied by three after rounding off the 279 to 300.

Since Michigan's basic allocation was based on cases of measles reported by the various health jurisdictions in 1949, it would appear equitable that the supply of gamma globulin be reallocated back to the health jurisdictions in proportion to the number of reported cases for 1949.

In those health jurisdictions having full-time health departments, the health department will serve as the distribution station. Physicians may obtain gamma globulin within the limits of the available supply upon reporting the name and address of a case and the ages and approximate weights of the contacts who are to receive the gamma globulin. Arrangements are being worked out for some other distribution plan for the thirteen counties without full-time health service.

Since the supply of gamma globulin is so limited, it is essential that it be conserved in every way possible. Certainly, its use should be restricted to children five years of age and under, and rarely for an older child if a concurrent illness makes it imperative. Because of the short supply it may be necessary to limit its use to contacts age three years and under. Also the dose administered to any child should be based on the actual weight of the child according to the dosage schedule accompanying the product. The tendency has been to give each contact one 2 cc. vial irrespective of weight. This obviously would result in the passive prevention of measles in a large number of smaller children with the result that later on in the measles season, they would be reinfected when their passive immunity wore out.

This is a preliminary proposal and subject to modification if more gamma globulin becomes available. There is no guarantee that the amount will be increased nor do we have any exact knowledge as to when Michigan's total allotment will be received by the Department.

SUMMER TRAINING FOR VISION AND HEARING TECHNICIANS

Summer short courses are being planned to train locally employed persons to do vision and hearing screening as a part of community programs sponsored by local health departments, physicians and school authorities. An attempt will be made to offer the training sessions in teachers' colleges in several parts of the state, depending upon requests which indicate interest in planning for vision and hearing programs next year. Stipends will be available for room and board for persons who are recommended by local health departments.

HOUGHTON LABORATORIES HAVE NEW DIRECTOR

Alden Scott became director of the Houghton laboratories of the department on April 1, succeeding Ora M. Mills who retired after 33 years of service in that capacity. Mr. Scott has been in the Grand Rapids laboratories since 1945.

MANISTEE-MASON COUNTY HEALTH DEPARTMENT FORMED

Manistee and Mason counties have joined to form a district health department effective April 1. The main office will be located in Manistee. Until a full-time director is appointed, an acting director will serve in each county.

FOR VISUALLY HANDICAPPED PRESCHOOL CHILDREN

Of interest to parents of visually handicapped preschool children is announcement of the Annual Parent Institute and Play School for parents and their visually handicapped preschool children to be held at the Michigan School for the Blind in Lansing on September 2 to 5. The Department is again co-operating with the School in promoting attendance at the Institute. Inquiries should be addressed to Wallace J. Finch, Superintendent of the Michigan School for the Blind.

NEW LOCAL HEALTH DIRECTOR

Paul J. Christenson, M.D., became director of the Isabella-Mecosta-Osceola Health Department on March 18, coming to Michigan from Virginia where he was director of a tri-county health department.

UNIQUE RECORD OF SERVICE

The death of the Department's oldest horse brought to light something of a record in state service. Old Frank was 20 years old and had given 400 gallons of blood to be made into antitoxin for the people of Michigan. He was on production for 11 years and had been bled 161 times for tetanus antitoxin. His death was due to natural causes, not to immunization or bleeding.

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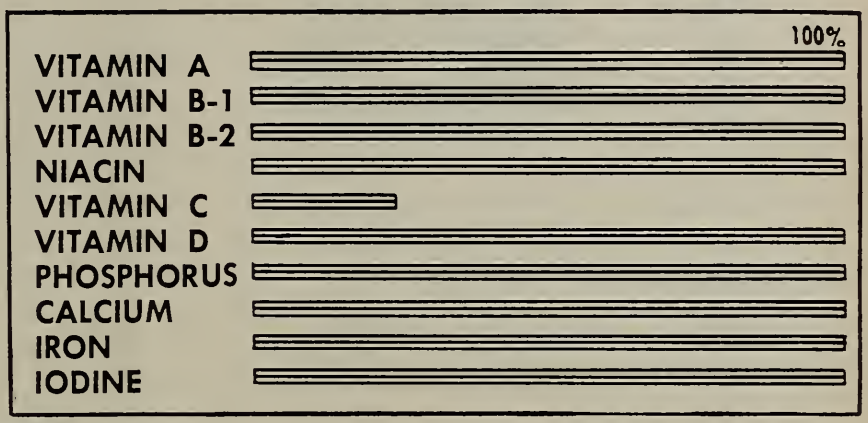
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In Memoriam

VINCENT L. BARKER, M.D., of Monroe, died February 28, at the age of fifty.

For the past twenty-one years he served the community of Monroe as a surgeon. He was graduated from the Indiana University School of Medicine in 1928 and interned at St. Luke's Hospital in Chicago. He took his residency in surgery at the Henry Ford Hospital, Detroit. Dr. Barker had been on the staff of Mercy Hospital, Monroe, since coming to the community. He was president of the Monroe County Medical Society in 1947 and was a Fellow of the American College of Surgeons.

Besides his activity in medical circles he served on the Board of Education of Monroe.

During World War II he served in the U. S. Navy for three and one-half years. His service included the building of a 500 bed hospital on Saipan. He was discharged with the rank of full commander.

Dr. Barker is survived by his wife, Martha; a son, Vincent L. Barker, Jr.; a daughter, Mrs. Robert Kallstrom; and a sister, Mrs. John Miller.

ROBERT A. BIGGS, M.D., of North Branch, died February 18, at the age of twenty-nine.

He had practiced in North Branch since 1949.

Dr. Biggs was graduated from the University of Illinois Medical School in 1947 and interned at Hurley Hospital, Flint. He served in the U. S. Navy for three years.

Dr. Biggs was on the staff of the Marlette Community Hospital and the Lapeer County Hospital. He was a member of the Lapeer County Medical Society.

He is survived by his wife, Doris; two daughters, Mary Lynne, and Shelley Ann; his mother, Mrs. Lynna Snowman, of Lapeer; and a sister, Mrs. W. E. Vivian.

GUY L. BREON, M.D., of Detroit, died February 15, at the age of sixty-eight.

Until his retirement six months ago, Dr. Breon had practiced medicine in Detroit for thirty-five years. He was a member of the staff of Harper Hospital and East Side General Hospital, Detroit. He was graduated from the University of Illinois Medical School in 1915.

Dr. Breon is survived by his wife, Agnes, and two daughters, Mrs. Clifford E. Rose and Mrs. Don E. Kelly.

GEORGE E. CLARK, M.D., of Detroit, died February 18, at the age of ninety-two.

Dr. Clark had practiced more than sixty years in Detroit. He retired two years ago from the active practice of medicine. Dr. Clark was graduated from the Detroit College of Medicine in 1888 and was a former member of the faculty. He was an Emeritus member of

(Continued on Page 548)



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The Michigan Alcoholic Rehabilitation Foundation is a non-profit organization devoted to the proper hospitalization of alcoholics seeking to stop drinking.

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Suxalmid tablets are indicated in the symptomatic treatment of rheumatoid arthritis, osteoarthritis, rheumatic fever, gout and neuromuscular affections.

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*T.M.

GEORGE E. CLARK

(Continued from Page 546)

the Michigan State Medical Society and a member of the Wayne County Medical Society.

Survivors include a nephew, Harold E. Clark, M.D., and nieces, Mrs. Wallace Mackenzie and Mrs. Frances Keller.

ROME Q. DeTOMASI, M.D., of Detroit, died February 26, at the age of sixty.

Dr. DeTomasi was graduated from Wayne University College of Medicine in 1921. He had practiced in Detroit and was on the staff of Grace Hospital.

Dr. DeTomasi is survived by his wife, Gladys; a daughter, Mrs. Stanley Loeffler; three brothers, and two grandchildren.

RUDOLPH H. LAMBERT, M.D., of Kalamazoo, died February 27, at the age of sixty-one.

Since 1930, Dr. Lambert had been medical superintendent of Fairmount Hospital in Kalamazoo. He was graduated from Wayne University College of Medicine in 1916. He interned at Providence and Herman Kiefer Hospitals, in Detroit.

During World War I, he served in the Army Medical Corps. After the war he began his specialized study of pulmonary diseases.

Before coming to Fairmount Hospital he was Assistant Medical Director at Rock Hill Sanatorium, Cincinnati, and was later Medical Director of the American Legion Hospital at Fort Custer.

Dr. Lambert was a member of the Kalamazoo Academy of Medicine, the American Trudeau Society, and the American College of Chest Physicians.

He is survived by a daughter, Mrs. Douglass F. Roy, of Richmond, Calif.; a son, John Lambert, Kalamazoo, and three grandchildren.

MARTHA L. LONGSTREET, M.D., of Saginaw, died February 26, at the age of eighty-two.

For nearly half a century she served the community of Saginaw, first as a nurse, and later as a general practitioner and pediatrician.

Dr. Longstreet received her nurses' training at Bliss Deaconess Hospital in Saginaw in 1893. She later entered the University of Illinois College of Medicine and was graduated in 1904. Dr. Longstreet came to Saginaw following her graduation and practiced as a general practitioner for ten years and as a pediatrician for thirty-five years.

Dr. Longstreet was a Life member of the Michigan State Medical Society and the Saginaw County Medical Society.

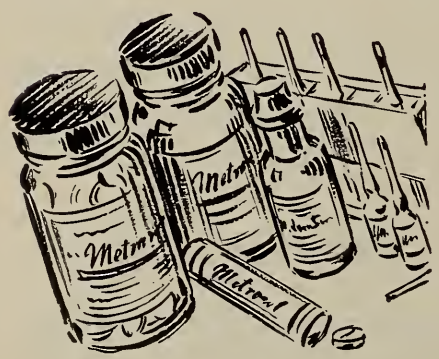
In 1938 she was designated "Michigan's Most Outstanding Woman" by the Grand Rapids Inter-Club Council of Business Women.

Dr. Longstreet was a member of the consulting staff of St. Luke's, St. Mary's, and Saginaw General Hospital.

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CARL A. MITCHELL, M.D., of Benton Harbor, died March 17, at the age of seventy-three.

For almost the past half century he had served the community of Benton Harbor. Dr. Mitchell was graduated from the Bennett College of Eclectic Medicine and Surgery in 1906. Dr. Mitchell interned at the Garfield Clark Sanitarium in Chicago. He was a member of the staff of Mercy Hospital.

Dr. Mitchell was a past president of the Berrien County Medical Society and a Life member of the Michigan State Medical Society. He had also served as city health officer in Benton Harbor and was a member of the Board of Education. He was a member of the American Association of Industrial Physicians and Surgeons.

Dr. Mitchell is survived by his wife, Millie; two sons, Carl Mitchell and Robert Mitchell; and one daughter, Mrs. John D. Louth. He also leaves a sister, three brothers, and ten grandchildren.

MILES J. MURPHY, M.D., of Grand Rapids, died March 10, at the age of fifty-two.

Following his graduation from the University of Michigan Medical School in 1927, Dr. Murphy interned at St. Mary's Hospital and later opened his practice in Grand Rapids in 1929. He was chief of Staff of St. Mary's Hospital in 1951 and 1952. He was also on the courtesy staff of Blodgett and Butterworth Hospitals.

During World War II, he served in the Army Medical Corps from 1942 to 1945. Dr. Murphy was a member of the Kent County Medical Society.

Besides his wife, Catherine, he leaves three sons and two daughters. They are Miles J. Murphy, Jr., Francis Murphy, Patrick Murphy, Mary Kathleen, and Carmelita. He also leaves a brother, Dr. John D. Murphy and two sisters, Mrs. LeRoy Hewitt, and Mrs. Paul V. Gadola, of Flint.

ARTHUR L. ROBINSON, M.D., of Burr Oak, died February 17, at the age of seventy-nine.

For the past fifteen years Dr. Robinson had served the communities of Burr Oak, Bronson, Sturgis, Sherwood, and Athens. He was graduated from the Bennett College of Eclectic Medicine and Surgery in 1902. Dr. Robinson was a member of the Calhoun County Medical Society.

He is survived by his wife, Mary, and three sons. They are Fred, of Howe, Ind.; John, of Caseville, Mo., and George, of Climax.

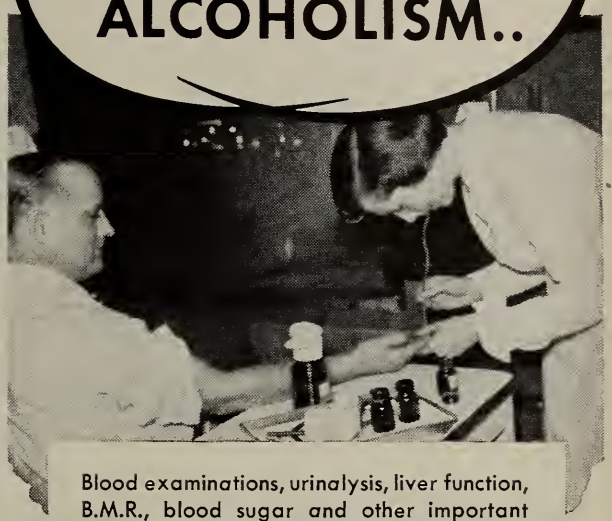
DONALD M. SCHUITEMA, M.D., of Grand Rapids, died March 7, at the age of forty-four.

Since 1941, he has served the community of Grand Rapids as an obstetrician and gynecologist. He was graduated from Rush Medical College in 1936. Dr. Schuitema was Chief of the Obstetrics Department of Blodgett Hospital. He was also a member of the Consulting-Visiting Staff of St. Mary's and on the courtesy staff of Butterworth Hospital.

Dr. Schuitema was a member of the Kent County

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Medical Society and served as a Lieutenant Colonel in the army in World War II.

He is survived by his wife, Louise; a daughter, Virginia; and a sister, Mrs. Myron Hadley of Danville, Indiana.

Communications

Dear Doctor Haughey:

I have been corresponding with Senator Ferguson for over a year now, in regard to the special issuance of a Beaumont Memorial commemorative stamp. He writes me that the prospects are good, and he has taken it up with the Postmaster General. I wish you would send him a copy of the February, 1953, JOURNAL, or send me one to send him.

Also, if more members of the Michigan medical profession would write him and encourage him, I believe it would definitely go through.

Sincerely yours,

AENEAS CONSTANTINE, M.D.

Harrisville, Michigan
February 25, 1953

* * *

Dear Editor:

We have long enjoyed your Journal, but would like to congratulate you particularly on the February, 1953 number. Beaumont has long been a favorite character, especially in Digestion Lectures, and this gives new information of value.

Yours sincerely.

W. A. FRASLEY, *The Editor*

Ontario Medical Review
Official organ, Ontario
Medical Association

* * *

Dear Doctor Haughey:

Thank you very much for the publicity given to the Association of American Physicians and Surgeons' seventh annual national Essay Contest for high school students, published in the February, 1953, JOURNAL of the Michigan State Medical Society.

Based upon the number of free packaged libraries which AAPS furnishes to participating county and state medical societies, the Essay Contest has grown to eighteen times the size of the first Contest sponsored seven years ago.

Co-operation such as yours has contributed largely to the steadily increasing acceptance of the Contest and to its unusual success.

With very best wishes to you and your Michigan colleagues, I am

Sincerely,

CHARLES L. FARRELL, M.D.
President, AAPS

February 26, 1953

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MICHIGAN STATE MEDICAL SOCIETY ANNUAL SESSION
September 23-24-25, 1953

MICHIGAN AUTHORS

Plinn F. Morse, M.D., of Detroit, is the author of an article, "Remarks on Pathology and Its Role in the Practice of Ophthalmology and Otolaryngology," published in *Transactions American Academy of Ophthalmology and Otolaryngology,* January-February, 1953.

Osborne A. Brines, M.D., of Detroit, is the author of an article, "Cor Pulmonale," published in *Arizona Medicine,* March, 1953.

Edward P. Cawley, M.D., University of Virginia Medical School, Charlottesville, Virginia, formerly Assistant Professor of Dermatology, University of Michigan, Ann Arbor, is the author of an article, "Common Diseases of the Scalp," published in *The American Academy of General Practice,* March, 1953.

Carey P. McCord, M.D., of Ann Arbor, is the author of an article, "Science Miniature-Dancing Feet," published in *Industrial Medicine and Surgery,* March, 1953.

A. C. Furstenberg, M.D., of Ann Arbor, is the author of an abstract, "Anatomic Considerations of Ménière's Disease," published in *American Practitioner Digest of Treatment,* March, 1953.

Stefan S. Fajans, Department of Internal Medicine, is the author of an abstract, "Recent Advances in the Management of Diabetic Coma," published in the *University of Michigan Medical Bulletin,* February, 1953.

H. M. Pollard, M.D., and **R. J. Bolt, M.D.,** Department of Internal Medicine, are the authors of an abstract, "Potassium Balance in Ulcerative Colitis," published in the *University of Michigan Medical Bulletin,* February, 1953.

Alexander Blain, III, M.D., of Detroit, is the author of an article, "Scalenus Anticus Syndrome Precipitated by an Attack of Pleurisy," published in *Surgery,* December, 1952.

James Clark Maloney, M.D., of Birmingham, has sent us a copy of the February, 1953 issue of the *Tokyo Journal of Psychoanalysis,* at the request of Kenji Ohtsuki, Editor of the Journal. With the exception of two pages this journal is printed in Japanese. The February issue, contains a translation of an article by Dr. Maloney which was first published in THE JOURNAL of the Michigan State Medical Society, August, 1947.

* * *

The Mount Carmel Mercy Hospital annual clinic day, January 28, was very successful, with over 550 in attendance, some coming from the Upper Peninsula.

Nearly a full page of the March 30 issue of *Newsweek* magazine is devoted to an enthusiastic report of how the AMA and state and county medical societies have helped to eliminate the causes of complaints voiced by patients that doctors keep people waiting in their offices too long; that they are cold and impersonal, and that they are inept at handling medical fees.

The *Newsweek* story grew out of a seminar on the subject, "Patients Are People," which the Medical Society of the District of Columbia held recently for physicians' office aides. Interest in the meeting was so high that more than 500 persons jammed the society's auditorium and many had to be turned away.

A *Newsweek* Washington correspondent gathered much of his story material from the discussion itself and later interviewed Carol Towner, of the AMA Public Relations Department, who attended the session. She authored the popular pamphlet. "Winning Ways With Patients," which was distributed to all physicians by the AMA a few months ago. The pamphlet pin-points how best to solve problems that would improve doctor-patient relationships.

* * *

The Sixth Annual Clinic Day of the Bon Secours Hospital will be held June 9, 1953.

* * *

A scientific editorial in *The Journal of American Medical Association* March 28, 1953, refers to a paper by Drs. E. C. Texter and D. H. Kaump which appeared in THE JOURNAL of the Michigan State Medical Society, September, 1948.

* * *

1st Lt. Fae M. Adams, MC, of San Jose, California, was sworn in March 11, 1953 as the first woman physician to be commissioned in the U.S. Regular Army at ceremonies attended by Maj. Gen. George E. Armstrong, Army Surgeon General and representatives of the Army's women service groups.

* * *

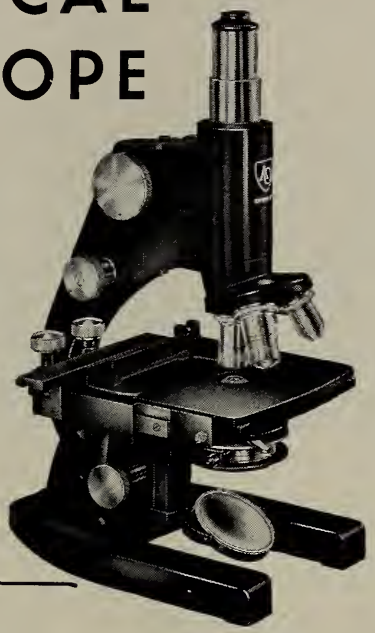
The Army Medical Service has broadened its tests of dextran, a plasma substitute derived from sugar, to include all medical units in this country and oversea theaters, Major General George E. Armstrong, MC, the Surgeon General, announced. Army physicians have been authorized to requisition and use dextran wherever

(Continued on Page 554)

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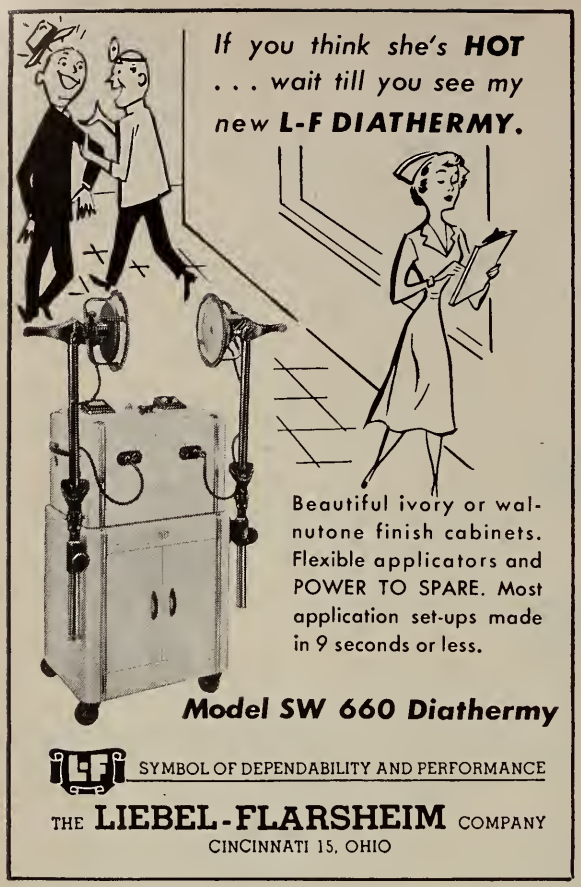
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(Continued from Page 552)

they believe it may be suitably employed in place of plasma.

Extensive trials of dextran in military and civilian hospitals in the United States and on combat casualties in Korea have shown that the polysaccharide plasma expander possesses many of the qualities of blood plasma and may eventually supplant plasma if present findings are confirmed.

* * *

The Louisiana State Medical Society, in conformity with the action and direction of the House of Delegates, effective January 1, 1953 changed the name of its journal from *The New Orleans Medical and Surgical Journal* to *The Journal of the Louisiana State Medical Society.*

* * *

Physical Medicine and Rehabilitation.—The American Congress of Physical Medicine and Rehabilitation will hold its thirty-first Annual Scientific and Clinical Session at the Palmer House, Chicago, August 31, through September 4, 1953. For further information write Walter J. Zeiter, M.D., Executive Director, American Congress of Physical Medicine and Rehabilitation, 30 N. Michigan Avenue, Chicago 2, Illinois.

* * *

Meeting of X-Ray Technicians.—The first international convention of x-ray technicians is scheduled June 28, through July 2, 1953, at the Royal York Hotel, Toronto, Canada. The meeting is sponsored jointly by the Canadian Society of Radiological Technicians and the American Society of X-Ray Technicians. Additional information may be obtained by contacting Robert J. Vennie, R.T., 426 Oneida Street, Portage, Wisconsin.

* * *

Tuberculosis Symposium.—The Second Annual Tuberculosis Symposium for General Practitioners will be held July 13-17, at Saranac Lake, New York. The Symposium is sponsored by the Saranac Lake Medical Society and the Adirondack Counties Chapter of the New York State Academy of General Practice. The meeting is approved by the American Academy of General Practice for twenty-six hours of formal credit for its members. Complete information concerning the program can be obtained by writing Richard P. Bellaire, M.D., Tuberculosis Symposium for General Practitioners, P.O. Box 707, Saranac Lake, New York.

* * *

Summer Camp for Diabetic Children.—For the fifth season, the Chicago Diabetes Association, Inc., will conduct a summer camp for diabetic children from July 21, 1953, to August 10, 1953, at Holiday Home, Lake Geneva, Wisconsin. Boys and girls between the ages of eight and fourteen years, inclusive, will be accepted for the three-week camping period. The fee is $150 and covers the three-weeks outing and transportation from Chicago. (Fee reductions may be arranged when considered necessary.) Besides the regular camp personnel,

(Continued on Page 556)

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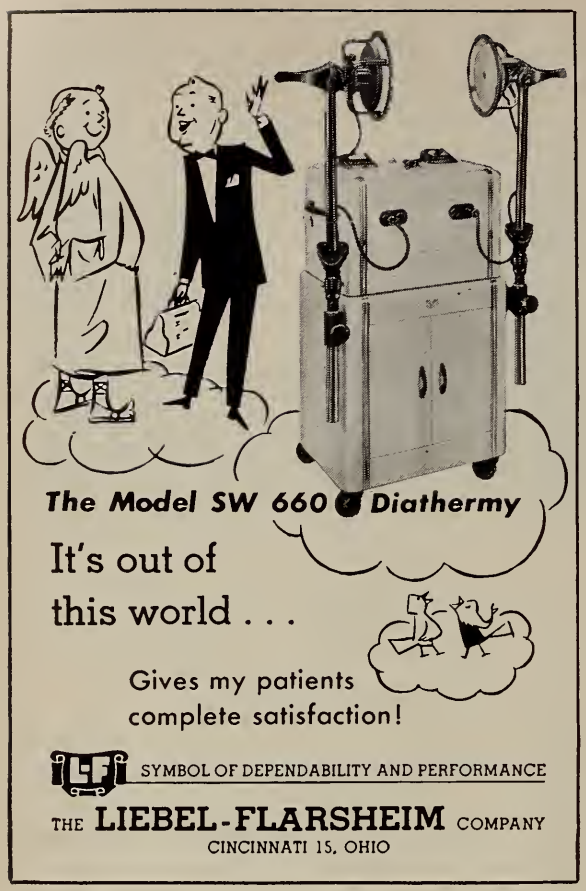
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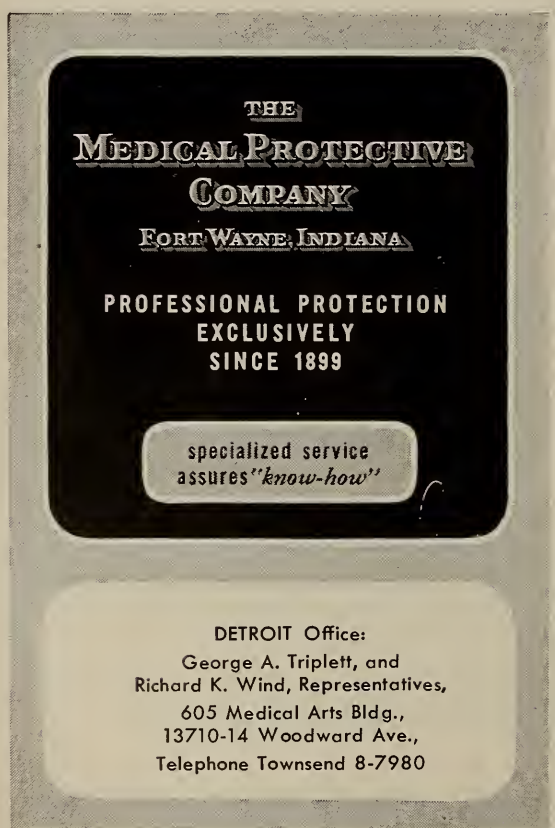
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(Continued from Page 554)

there will be a staff of dietitians and resident physicians trained in the care of diabetic children. Doctors of medicine are requested to notify parents of diabetic children and to supply the names of the children who would like to attend the camp. Inquiries and applications should be addressed to Service Unit, Chicago Diabetes Association, 110 S. Dearborn Street, Chicago 3, Illinois.

* * *

Genesee Cancer Day.—More than 200 doctors of medicine from Michigan and nearby areas attended the Eighth Annual Cancer Day program of the Genesee County Medical Society on April 8. L. W. Hull, M.D., Detroit, President-Elect of MSMS, presided at the morning session and Clifford H. Keene, M.D., Ann Arbor, Chairman of the MSMS Cancer Control Committee, presided in the afternoon. Six nationally known authorities on cancer detection, treatment and research, spoke at the meeting which was held in Hurley Hospital, Flint.

* * *

V. A. Hospital Manager Appointed.—Morley B. Beckett has been appointed manager of the new 496-bed Veterans Administration Hospital at Ann Arbor, Michigan. The Ann Arbor Hospital is scheduled to be opened this summer. Dr. Beckett has been manager of the Veterans Administration Hospital at Saginaw since 1950.

* * *

Leo H. Bartemeier, M.D., Detroit, was appointed to the National Manpower Council by Dr. Grayson Kirk, President of Columbia University, New York City. The Council was established by President Eisenhower at Columbia in 1951, to provide a continuing appraisal of America's manpower resources. The Council operates under a Ford Foundation Grant and its activities are centered at the Columbia University Graduate School of Business.

* * *

The Michigan State Board of Registration in Medicine announces that licensure examinations will be held concurrently in Ann Arbor and Detroit on June 10, 11, and 12, beginning promptly at 8:30 A.M.

Tentative arrangements have been made to use the Waterman Gymnasium for the examination at the University of Michigan and the Auditorium of the College of Medicine at Wayne University.

* * *

The inauguration of Dr. Edward J. McCormick of Toledo, Ohio, as President of the American Medical Association will be carried by the American Broadcasting Company radio network on Wednesday night, June 3, it has been announced by AMA headquarters in Chicago.

The inaugural ceremony at the 102nd Annual Session of the AMA in New York City will be heard over more than 300 ABC stations in this country, Alaska and Hawaii. Except for some local variations because of station program schedules, the inauguration will be car-

(Continued on Page 558)

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SURGERY—Intensive Course in Surgical Technic, two weeks, starting May 11, June 1, June 15
Surgical Technic, Surgical Anatomy and Clinical Surgery, four weeks, starting June 1
Surgical Anatomy and Clinical Surgery, two weeks, starting June 15, August 17
Gallbladder Surgery, ten hours, starting June 29
Surgery of Colon and Rectum, one week, starting May 11
General Surgery, two weeks, October 12
Thoracic Surgery, one week, starting June 8
Breast and Thyroid Surgery, one week, starting June 22
Esophageal Surgery, one week, starting June 22
Fractures and Traumatic Surgery, two weeks, starting June 15
GYNECOLOGY—Intensive Course, two weeks, starting June 15
Vaginal Approach to Pelvic Surgery, one week, starting June 8
OBSTETRICS—Intensive Course, two weeks, starting June 8
PEDIATRICS—Congenital Heart Disease, two weeks, starting May 18
Cerebral Palsy, two weeks, starting June 15
MEDICINE—Gastroenterology, two weeks, starting May 18
Electrocardiography and Heart Disease, two weeks, starting July 13
Allergy, one month and six months, by appointment
CYSTOSCOPY—Ten-day Practical Course starting every two weeks
DERMATOLOGY—Intensive Course, two weeks, starting May 11

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(Continued from Page 556)

ried at 10 to 10:30 P.M. in the Eastern Time Zone and 9 to 9:30 P.M. in all other time zones.

The actual inaugural ceremony will take place Tuesday night, June 2, in the Hotel Commodore, but it is expected that practically all radio and television time that night will be disrupted by special news and film programs on the coronation of Queen Elizabeth. It therefore will be necessary to transcribe the program for a delayed broadcast on Wednesday night.

Also originating from the AMA New York meeting this year will be the popular "Dr. Christian" radio program, featuring the well-known actor, Jean Hersholt. This program, which will be staged and transcribed Tuesday night one hour prior to the inaugural ceremony in the Grand Ballroom of the Hotel Commodore, also will be re-broadcast on Wednesday night. It will be carried by the Columbia Broadcasting System.

All physicians who will not be in New York for the AMA meeting are urged to watch the radio listings in their newspapers for the local broadcasting times of the ABC inaugural program and the CBS "Dr. Christian" show, both on Wednesday night, June 3.

AMERICAN THERAPEUTIC SOCIETY

The annual meeting of the American Therapeutic Society will be neld in the Hotel Biltmore in New York City on May 28-31, 1953.

Outstanding in the program is a Symposium on Tobacco, which includes the following:

Moderator—Arthur C. DeGraff, M.D., New York

"The Allergic Response to Tobacco"—W. C. Spain, M.D., New York

"The Influence of Smoking upon the Gastro-Intestinal Tract."—Robert C. Batterman, M.D., New York

"Evaluation of the Effects of Tobacco Smoking in Relation to the Central Nervous System, Organic or Psychiatrically"—H. Randolph Unsworth, M.D., New Orleans

"Vascular Responses to Tobacco"—A. Wilbur Duryee, M.D., New York

"The Effects of Smoking of Nicotine on the Cardiovascular System of Normal Persons and Patients with Hypertension"—Grace Roth, M.D., Mayo Clinic

"The Pharmacology of Tobacco"—Harvey B. Haag, M.D., Richmond

"Role of Tobacco in Pulmonary Cancer"—Ernest L. Wynder, M.D., Memorial Hospital, New York

Round-Table Discussion

In addition are two symposiums:

"Recent Advances in Medicine"—O. P. J. Falk, M.D., St. Louis.

"Recent Advances in Surgery"—W. Wayne Babcock, M.D., Philadelphia.

One entire day will be devoted to new items in the therapeutic armamentarium.

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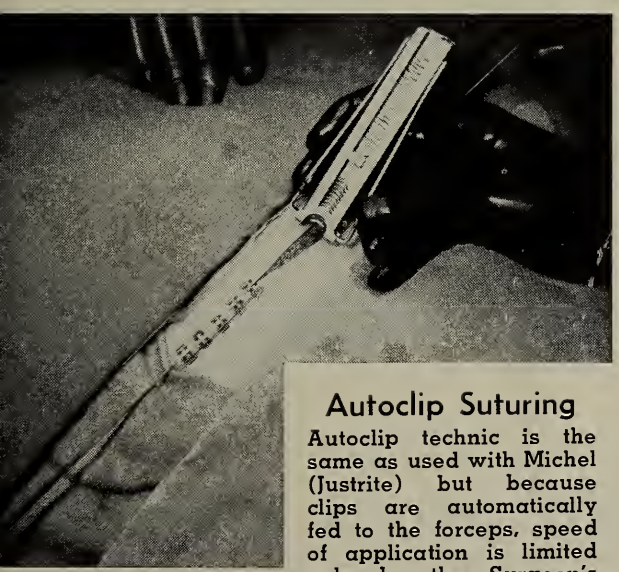
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University of Michigan Medical School students were guests at the Parke, Davis & Company Laboratories in Detroit on February 18-19, 1953.

L. Fernald Foster, M.D., Bay City, MSMS Secretary, was guest speaker at a joint meeting of the Bay County (Florida) Medical Society and its Woman's Auxiliary which was held in Panama City, Florida, on March 30. Dr. Foster's topic was "The Battle of the Ballot for Bay City General Hospital." More than 100 doctors of medicine and their wives and guests were present.

* * *

Legal Institute.—The Michigan Hospital Association in co-operation with Michigan State College is conducting an Institute on "Legal Aspects on Hospital Operation and Management." The Institute will be held Wednesday, Thursday, and Friday, May 27-28-29, at the Kellogg Center in East Lansing. J. Joseph Herbert, L.L.B., Manistique, Legal Counsel of MSMS, has been invited to discuss the topic "Legal Responsibility of the Hospital for the Care and Treatment of Patients."

* * *

Hill-Burton Hospital Construction in Michigan.—As of March 1, 1953, Hill-Burton Hospital Construction in Michigan included twenty-six projects completed and in operation at a total cost of $21,636,341, including a federal contribution of $8,123,893 and supplying 1,466 additional beds. According to the report, there were fourteen projects under construction at a total cost of $15,487,208 with a federal contribution of $5,815,527 and designated to supply 769 additional beds. There are eight projects that have been approved but are not as yet under construction. These projects will cost $6,729,700 and supply 442 additional beds.

* * *

Wilfrid Haughey, M.D., Battle Creek, presided at a Conference of the American Association of University Women, February 21. Dr. Haughey introduced the speakers who included his son-in-law, Don Dolan, and Robert Koopman of the Department of Education. The topic under discussion at the meeting was "Our Foreign Relations with Special Interests in Europe." Dr. Haughey spoke on March 2, before the Battle Creek Business and Professional Women's Association and discussed the topic "Medical Economics." He also spoke at the Soroptomist Club of Battle Creek, March 26, the topic, "Health and Medical Relations."

* * *

E. W. Schnoor, M.D., Grand Rapids, was named President-Elect of the Federation of State Medical Licensing Boards of the United States at a meeting in

(Continued on Page 562)

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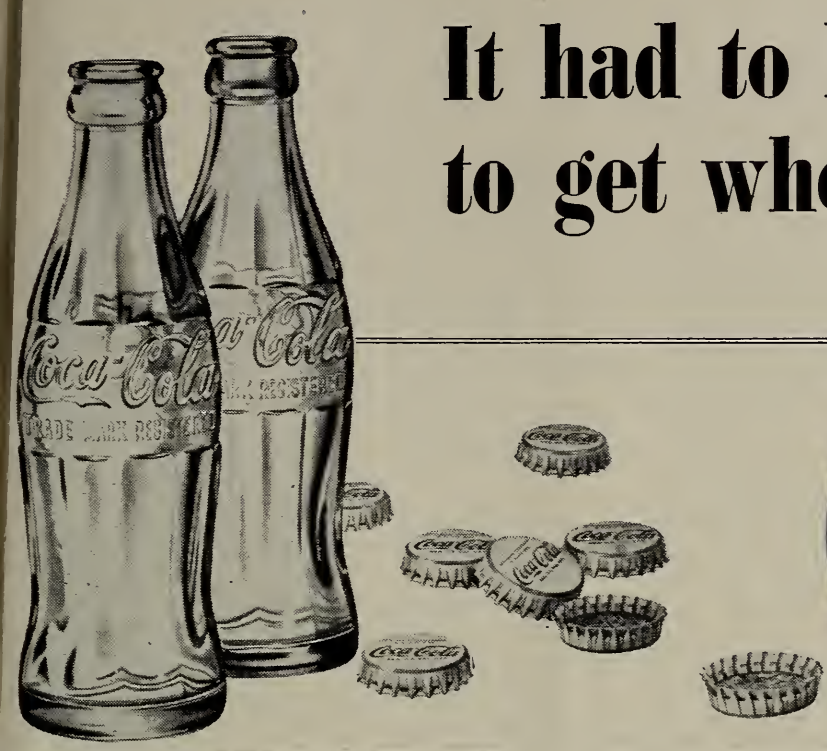
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30 days of Nurse at Home	5.00 per day	10.00 per day	15.00 per day	20.00 per day
Laboratory Fees in Hospital	5.00	10.00	15.00	20.00
Operating Room in Hospital	10.00	20.00	30.00	40.00
Anesthetic in Hospital	10.00	20.00	30.00	40.00
X-Ray in Hospital	10.00	20.00	30.00	40.00
Medicines in Hospital	10.00	20.00	30.00	40.00
Ambulance to or from Hospital	10.00	20.00	30.00	40.00
COSTS (Quarterly)				
Adult	2.50	5.00	7.50	10.00
Child to age 19	1.50	3.00	4.50	6.00
Child over age 19	2.50	5.00	7.50	10.00

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(Continued from Page 560)

Chicago in February. Dr. Schnoor takes office as President of the organization in February, 1954.

* * *

Tuberculosis Cases.—In 1951 among new cases classed as active pulmonary tuberculosis, three of every four (2,437 of 3,287) were in advanced stages. It is probable that all of them had already spread infection before they could be brought under isolation and treatment.

Among new cases classed as inactive and arrested pulmonary tuberculosis, one of every four (468 of 1,671) were further classed as moderately or far advanced. These, too, had been potential sources of infection for unknown periods of time.

Here are nearly 3,000 reasons for Michigan's continuing high tuberculosis case load.

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58th Anniversary Meeting
June 19-20, 1953
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Speakers:

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Pediatrics
Lowell D. Snorf, M.D., Northwestern University
Internal Medicine
Francis Senear, M.D., Chicago, Illinois
Dermatology
L. W. Freeman, M.D., University of Indiana
Neuro-Surgery
Carl Davis, Jr., M.D., Chicago, Illinois
Cardiac Surgery
Jack A. Klieger, M.D., Milwaukee, Wisconsin
Obstetrics
Robert Baldwin, M.D., Marshfield, Wisconsin
Internal Medicine
Bruce Fralick, M.D., University of Michigan
Ophthalmology
John L. Emmet, M.D., Mayo Clinic, Rochester, Minn.
Urology
Dean Mehas, M.D., Pontiac, Michigan
General Practice
John Steele, M.D., Milwaukee, Wisconsin
Chest Surgery

Saturday, June 20
(Afternoon) Recreation period
(Evening) Banquet, with ladies invited.

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BON SECOURS HOSPITAL
Sixth Annual Clinic Day Program
Tuesday, June 9, 1953

Morning Session—9:45 A.M.
General Chairman for Program
E. Gordon Aldrich, M.D.

Moderator—Donald N. Sweeny, Jr., M.D.

9:45 Modern Concepts of Arteriosclerosis.....
Hugh Stalker, M.D.
10:00 Recent Advances in the Understanding and Treatment of Shock.....C. J. France, M.D.
10:15 Gamma Globulin—Its Uses Today.....
I. F. Burton, M.D.
10:30 The Physician, Himself, As a Therapeutic Agent.....H. H. Sadler, M.D.
10:45 Glaucoma in General Practice..A. D. Beam, M.D.

Moderator—Lyle E. Heavner, M.D.

11:00 Congenital Urologic Lesions in Children.....
G. W. Sewall, M.D.
11:15 Solitary Cyst of the Kidney.....
Watson Beach, M.D.
11:30 Gangrene of the Testicle.....I. G. Downer, M.D.
11:45 Esophageal Hiatus Hernia..J. B. Hartzell, M.D.
12:00 Osseous Defects—Lumbo-Sacral Joint.....
F. J. Kelley, M.D.
12:15 Plastic Surgery in Carcinoma of Head and Neck.....E. J. Hill, M.D.

Luncheon—12:30 P.M.

Luncheon will be served by courtesy of the Sisters of Bon Secours Hospital. The meeting will be adjourned until the evening session.

Evening Session—8:00 P.M.

Moderator—Nelson M. Taylor, M.D.

8:00 One Thousand Appendicectomies, a Clinico-pathologic Correlation.....J. A. Kasper, M.D.
8:15 Irradiation and Surgical Treatment of Deafness.....J. E. Coyle, M.D.
8:30 Tetanus—An Unusual Case.....
D. N. Sweeney, Jr., M.D.
8:45 Abnormalities of the Placenta.....
R. G. Swanson, M.D.
9:00 The Surgical Management of Lesions of the Liver and Bile Ducts in Infants and Children.....Clifford Benson, M.D.
9:15 Roentgen Study of the Acute Abdomen.....
E. F. Lang, M.D.
9:30 Diagnostic Cerebral Arteriography.....
G. R. Granger, M.D.
9:45 Some Psychosomatic Aspects of Convulsive Disorders.....H. W. Bird, M.D.

A buffet supper will be served by courtesy of the Medical Staff of Bon Secours Hospital. All members of the Medical Profession are cordially invited.

All papers will begin and end on time. There will be some opportunity for a short discussion at the conclusion of each paper.

THE DOCTOR'S LIBRARY

Acknowledgment of all books received will be made in this column, and this will be deemed by us as full compensation to those sending them. A selection will be made for review, as expedient.

THE ANATOMY OF THE NERVOUS SYSTEM. Its Development and Function. By Stephen Walter Ranson, M.D., Ph.D., Late Professor of Neurology and Director of Neurological Institute, Northwestern University Medical School, Chicago. Revised by Sam Lillard Clark, M.D., Ph.D. Professor of Anatomy, The Vanderbilt University School of Medicine, Nashville. Ninth Edition. 434 illustrations, 18 in color. Philadelphia: W. B. Saunders Co., 1953. Price $8.50.

The reviewer has been acquainted with this textbook for the past fifteen years. During that time there have been changes but only relative to the inclusion of new information. The format has remained unchanged. The revision by its present author follows the style of the previous editions. New information is now presented in those fields which in the past reported a dearth of knowledge. There is reference especially to the olivary bodies, the formatio reticularis and sensory representation in the cerebellum. There is a much more complete presentation of the functioning of the cerebellum and the symptoms that result from damage to that organ.

As with previous editions, this is principally a class room textbook. The illustrations in the gross anatomy section have not been made more voluminous nor clear. A change in that section would seem to enhance the value of the book. There is a continuation in the illustrations of serial sections through the brain down to the spinal cord. These are helpful to the student in their study of the relationship of cell groups, tracts, decussations, et cetera. It appears superfluous to make comments on a work that has become standard for the past thirty-three years and now is in its ninth edition.

G.K.S.

CLINICAL OBSTETRICS. By Members of the Staff of the Pennsylvania Hospital. Edited by Clifford B. Lull, M.D., Late Director, Division of Obstetrics and Gynecology, Pennsylvania Hospital and Robert A. Kimbrough, M.D., Director of the Division of Obstetrics and Gynecology, Pennsylvania Hospital; Professor of Gynecology and Obstetrics, Graduate School of Medicine, University of Pennsylvania; Gynecologist to the Graduate Hospital. 392 illustrations and 8 color plates. Philadelphia: J. B. Lippincott Co., 1953. Price $10.00.

This is probably one of the most comprehensive treatises on clinical obstetrics ever compiled. It certainly ranks within the first five in the field. It draws from clinical experience of twenty key members on the staff of the Pennsylvania Hospital. The subject matter embraces the anatomy, embryology and obstetrical care and the puerpural period. There is a section on the newborn and the legal aspects of obstetrical practice. The material included is colored by the experience of the authors at the Pennsylvania Hospital. We would include this as a top choice in the obstetrical library.

R.J.C.



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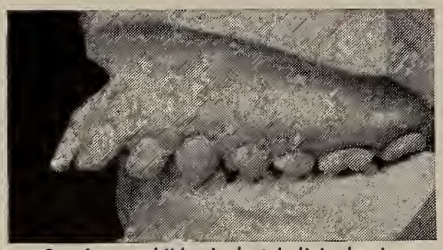
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PHEOCHROMOCYTOMA AND THE GENERAL PRACTITIONER. By Joseph L. DeCourcy, M.D., and Cornelius B. DeCourcy, M.D., authors of Pathology and Surgery of the Thyroid. Cincinnati: DeCourcy Clinic, 1952.

This review is a well-presented consideration of the history, diagnosis and treatment of pheochromocytoma, with especial consideration of a case report published in THE JOURNAL of the Michigan State Medical Society, December, 1951, by Drs. Lloyd T. Iseri, Douglas Chandler, Gordon B. Myers and Albert J. Boyle. There have been additions, and other material used, but a goodly section of the book is based on that article. This condition of extreme hypertension and its relief through surgery, if caused by the peculiar tumor of the adrenal gland, is intriguing. We shall soon have another paper on a similar topic.

W.H.

SYNOPSIS OF OBSTETRICS. By Jennings C. Litzenberg, B.Sc., M.D., F.A.C.S., Late Professor Emeritus of Obstetrics and Gynecology, University of Minnesota Medical School, Minneapolis. Fourth edition, revised by Charles E. McLennan, M.D., Professor of Obstetrics and Gynecology, Stanford University School of Medicine, San Francisco. 157 illustrations, including 5 in color. St. Louis: The C. V. Mosby Co., 1952. Price $3.50.

This is a coatpocket, very comprehensive edition which covers every phase of obstetrical practice. The subject matter is well organized and is arranged in one-two-three order without historical background or explanatory references. This is an excellent book for either the student or general practitioner. It will serve as a ready reference book.

R.J.C.

RECEIVED FOR REVIEW

Magazines and Pamphlets

The Scandinavian Journal of Clinical and Laboratory Investigation Supplementum 4 (Vol. 4). The Pulmonary Circulation at Rest and on Effort in Mitral Stenosis by Harald Eliasch. Printed by Ivar Haeggstroms Boktryckeri, A.B., Stockholm, 1952.

The Scandinavian Journal of Clinical and Laboratory Investigation. Edited for The Scandinavian Society for Clinical Chemistry and Clinical Physiology (Vol. 4), 1952, No. 3. Published by Medisinsk Fysiologisk Forenings Forlag, Oslo.

ACTA Psychiatrica et Neurologica Scandinavica. Supplementum 79. A Study in Manic-Depressive Psychosis Clinical, Social and Genetic Investigations by Ake Stenstedt. Norregade 6, Copenhagen: Ejnar Munksgaard, 1952.

ACTA Psychiatrica et Neurologica Supplementum 56. Microphthalmos and Anophthalmos With or Without Coincident Oligophrenia; a Clinical and Genetic-Statistical Study by Torsten Sjogren and Tage Larson. Norregade 6, Copenhagen: Ejnar Munksgaard, 1949.

ACTA Psychiatrica et Neurologica Scandinavica Supplementum 82. Morbus Alzheimer and Morbus Pick. A

Genetic, Clinical and Patho-Anatomical Study by Torsten Sjogren, Hakon Sjogren and Ake G. H. Lindgren. Norregade 6, Copenhagen: Ejnar Munksgaard, 1952.

The Harvard School of Public Health Annual Report, 1950-51. Cambridge: Harvard University, 1952.

Books Received

CHLOROPHYLL IN MEDICINE. Scientific Background. Clinical Experience in Topical Therapy. Mount Vernon, N. Y.: The Rystan Company. Free.

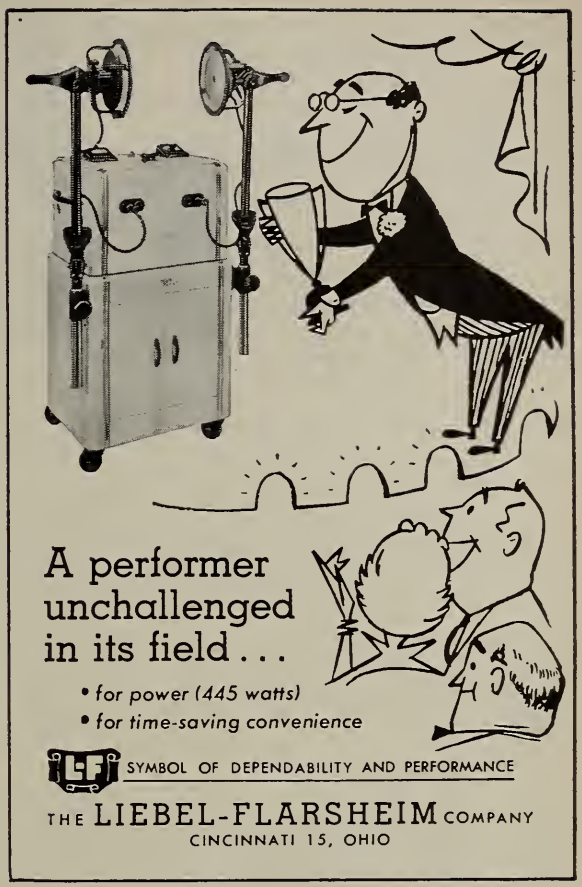
BUILDING AMERICA'S HEALTH. The Report of the President's Commission on the Health Needs of the Nation. 272 pages. Washington: Government Printing Office, $1.50.

A FRIEND IN CONGRESS

(Continued from Page 540)

byists. It publishes three newsletters, a bulletin, *Capitol Clinics,* and special bulletins.

The total expense of this operation, including all the salaries, is $200,000 a year. This sum has received the very special New Deal treatment of having a couple of ciphers added. This information was elicited by Congressman Hoffman, and placed on file to forever squelch the Truman and Ewing charge of a tremendous lobby. Our thanks and appreciation are due Mr. Hoffman.





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LOCUM TENENS—General practice in Detroit area from July 1, 1953, to January 1, 1954, by University of Michigan Medical School graduate, with rotating internship Philadelphia General Hospital. Michigan license. Mayo Foundation fellowship beginning January 1, 1954, Robert Caplinger, M.D., c/o Philadelphia General Hospital, Philadelphia, Pennsylvania.

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GOOD OPENING for general practitioner in Middleville, Michigan. Good community with four stable manufacturing industries. Vacancy open due to fact that I am entering Public Health Service. Office for sale or rent. No other M.D. in Middleville. Good hospital connections at Hastings, or Grand Rapids. Contact C. A. E. Lund, M.D., Middleville, Michigan.

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CHANGES IN ARMY MEDICAL INTERN PROGRAM

The length of time that Army interns will spend in the different hospital sections or services will be changed beginning July 1, the Education and Training Division, Office of the Army Surgeon General, has announced. The Division explained that the changes are in accordance with the requirements of the Council on Medical Education and Hospitals of the American Medical Association.

Under the new plan, medical interns in Army hospitals will spend three months in Internal Medicine, three months in Surgery, two months in Obstetrics and Gynecology, two months in Pediatrics and two months in a service that they select on the basis of personal preference. Electives open to the interns are Laboratory Service, Ophthalmology Section, Otolaryngology Section, and the Physical Medicine, Psychiatry and Neurology, and Radiology Services.

The program currently in effect allows the intern four months in Surgery, including Urology and Orthopedics, four months in Medical Service, including Pediatrics and Contagious Diseases, two months in Obstetrics and Gynecology, one month in Psychiatry and Neurology and one month for an elective chosen from among the following: Laboratory Service, Ophthalmology Section, Otolaryngology Section and Physical Medicine.

A total of 150 medical school graduates will intern in Army hospitals during the year 1953-54. Hospitals participating in the intern program are Army and Navy Hospital, Hot Springs, Ark.; Brooke Army Hospital, Fort Sam Houston, Tex.; Fitzsimons Army Hospital, Denver, Colo.; Letterman Army Hospital, San Francisco, Calif.; Madigan Army Hospital, Tacoma, Wash.; Murphy Army Hospital, Waltham, Mass.; Percy Jones Army Hospital, Battle Creek, Mich.; Tripler Army Hospital, Moanalua, Oahu, Hawaii; Valley Forge Army Hospital, Phoenixville, Pa.; Walter Reed Army Hospital, Washington, D. C.; and William Beaumont Army Hospital, Fort Bliss, Tex.

OSLER HELPS BEAUMONT MEMORIAL

A contribution to the Beaumont Memorial, now being erected on Mackinac Island by members of the Michigan State Medical Society, has been made by the celebrated Sir William Osler, M.D., through W. W. Francis, M.D., Librarian at McGill University, Montreal.

The late Doctor Osler, noted English physician of Canadian birth, has been dead for thirty-three years, but the contribution was made possible through his scientific achievements while he lived.

The contribution was sent to A. H. Whittaker, M.D., Detroit, by Dr. Francis of McGill, where Osler has a library of 7,500 titles. The money came from the royalty account of the Osler Library. For years, Osler's "Principles and Practice of Medicine" has been a standard textbook.

Thus one great physician has contributed to the shrine of another.

Work on the Michigan shrine to Beaumont began on March 26, 1953. The cornerstone will be laid on Friday, July 17, 1953, with appropriate ceremonies. The actual dedication of the completed Memorial will be held one year later—on Saturday, July 17, 1954, at Mackinac Island.

DEDUCTING POSTGRADUATE COSTS IN INCOME TAX REPORT

The U.S. Circuit Court of Appeals, Second Circuit, New York, recently decided a federal income tax case of considerable importance to the doctor of medicine.

For years, the Commissioner of Internal Revenue has ruled that expenses incurred by a physician in pursuing postgraduate medical education were personal in nature and not deductible for income tax purposes, in spite of the fact that the Internal Revenue Department permitted physicians to deduct, for income tax purposes, the costs of attending medical meetings (and also subscriptions to scientific publications and dues paid to medical organizations). It was difficult for the medical profession to appreciate what distinction could logically and legally be made between these

(Continued on Page 576)



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DEDUCTING POSTGRADUATE COSTS

(Continued from Page 574)

deductions which were allowed and the costs incurred by a doctor of medicine in attending a formal course offered to keep him up to date in the advancement of procedures of essential value to him in the treatment of his patients.

The AMA attempted to induce the Commissioner of Internal Revenue to review his earlier decision but the Commissioner refused. Therefore, the AMA filed a brief as amicus curiae in a case before the U.S. Tax Court in which a lawyer, named Coughlin, had been denied the right to deduct expenses incurred by him in attending postgraduate courses on taxation. The Tax Court held against Attorney Coughlin and an appeal was made to the U.S. Court of Appeals—the AMA again filing a brief.

On April 14, 1953, the U.S. Circuit Court of Appeals reversed the decision of the U.S. Tax Court, holding in effect that the lawyer could deduct for federal income tax purposes the expenses incurred by him in taking a postgraduate course dealing with taxation.

The doctor implications in the Attorney Coughlin case are being studied by the AMA and an explanatory story is being prepared for publication in *The Journal of the American Medical Association.*

Be on the lookout for this important feature in JAMA.

ATTORNEY GENERAL'S OPINION
(No. 1645)
Medicine, Practice of

The practice of psychotherapeutics constitutes the practice of medicine within the meaning of statute prohibiting the practice of medicine without a license.

J. Earl McIntyre, M.D., Secretary
State Board of Registration in Medicine
202 Hollister Building
Lansing 8, Michigan

Dear Dr. McIntyre:

By your letter of March 30, 1953, you have requested the opinion of the Attorney General on the question as to whether the practice of psychotherapy in any or all of its phases by non-medically trained people constitutes a violation of Act No. 237, Public Acts of 1899, as amended, 14.539, Mich. Stat. Ann.

The foregoing section defines the practice of medicine as "the actual diagnosing, curing or relieving in any degree, or professing or attempting to diagnose, treat, cure or relieve any human disease, ailment, defect, or complaint, whether of physical or mental origin, by attendance or by advice, or by prescribing or furnishing any drug, medicine, appliance, manipulation or method, or by any therapeutic agent whatsoever."

We are advised that psychotherapeutics, psychotherapy, constitutes (1) psychiatry; (2) mental therapeutics, mind-cure, or cure by making mental impressions or suggestions.

Section 14.537, Mich. Stat. Ann., prohibits the practice of medicine or surgery in this state without a license, and the Attorney General is of the opinion that the practice of psychotherapy comes within the definition of the practice of medicine found in the statute. In the case of *People v. Mulford,* 125 N.Y.S. 760, the treatment of ailments by suggestive therapeutics was held to be the practice of medicine.

Yours very truly,
FRANK G. MILLARD
Attorney General of Michigan

April 22, 1953.

HIGHLIGHTS OF EXECUTIVE COMMITTEE OF THE COUNCIL
April 23, 1953

Fifty-seven items were presented to the Executive Committee of The Council at its April meeting. Chief in importance were:

- Monthly financial reports were presented, studied and approved. Bills payable were presented and payment was authorized. The quarterly financial report of the Cancer Control Committee, to March 31, was presented and approved.
- *MSMS Representatives.*—C. J. Stringer, M.D., Lansing, was appointed as MSMS representative to attend meetings covering Study of Nursing Needs in Michigan. G. E. Anthony, M.D., Flint, chairman of the MSMS Child Welfare Committee, was appointed as MSMS representative to attend the Michigan Welfare League Conference of April 18. Moses Cooperstock, M.D., Marquette, was selected as MSMS representative to attend the fourth conference on Physicians and Schools, Highland Park. Illinois, September 30.
- R. A. Johnson, M.D., Detroit, was appointed as a member of the Rural Medical Service Committee. Edward F. Kickham, M.D., Saginaw was appointed a member of the Emergency Medical Service Committee.
- *Committee Reports:* The following were given consideration: (a) Medical Advisory Committee to Michigan Hospital Service, meeting of March 19: a breakfast to be held in Grand Rapids on Thursday morning, September 24, during the MSMS Annual Session, to acquaint the MSMS membership with the work of this committee, was authorized; (b) Study Committee on Basic Science Act, meeting of March 26; (c) Mental Hygiene Committee, meeting of April 1; (d) Legislative Committee, meeting of April 2; (e) Arbitration Committee, meeting of April 10; (f) Maternal Health Committee, meeting of April 16; (g) Beaumont Memorial Working Committee, meeting of March 18: contract between MSMS and E. J. Van Sweden, the contractor building the Beaumont Me-

(Continued on Page 578)



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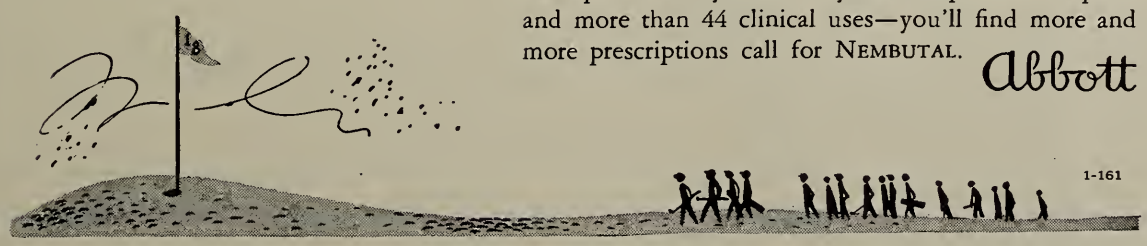
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HIGHLIGHTS OF THE COUNCIL

(Continued from Page 576)

morial on Mackinac Island, was reviewed; the work on the Beaumont Memorial began Wednesday, March 25, 1953. A sign describing the construction work was authorized. The cornerstone laying was scheduled for Friday, July 17, 1953, with the dedication of the completed building on July 17, 1954. Presentation by Mrs. Hugo Freund, Detroit, of a copy of one of Dr. Beaumont's original books, for housing in the Beaumont Museum, was accepted with thanks. A commemorative stamp for the Beaumont Memorial as recommended by E. E. Dufina, Postmaster on Mackinac Island, was approved—an effort to have the United States Post Office develop a Beaumont Memorial stamp, for release in July, 1954, to coincide with the dedication of the Beaumont Memorial was authorized; (h) Committee on Group Health and Accident Insurance, meeting on March 18; (i) Medical Jurisprudence Committee (a committee of the State Bar of Michigan), meetings of March 6 and of April 9: these meetings dealt mainly with provisions of the proposed medical examiner bill (S.B. 1293).

- *Remodeling front entrance of MSMS* headquarters at 606 Townsend Street, Lansing. Blueprints received from Architects Haughey & Black were presented and studied and the work was authorized.
- *The name of S. D. Steiner, M.D.,* Medical Director of Oldsmobile Division 6.M., Lansing, was submitted for the President's award to the physician making the greatest contribution to the employment welfare of the handicapped; Dr. Steiner's work is utilization of the blind in industry.
- *William Henry Gordon, M.D.,* Detroit, chairman of the MSMS Emergency Medical Service Committee, was authorized as MSMS representative to present to the American Medical Association's National Emergency Medical Service Committee the problems and suggestions his committee feels are in order regarding medical civil defense.
- *J. E. Livesay, M.D.,* Flint, was appointed as MSMS representative to work with Michigan State College on a proposed school for safe handling of x-ray equipment.
- *Tour of Sloan-Kettering Institute,* New York City, by nine Michigan M.D.'s, as guests of Mr. James Gariety of Adrian, Michigan, was reported; a vote of sincere thanks was placed on the minutes to Mr. Gariety for his interest in cancer research and control and his tangible contribution to cancer education.
- *The monthly reports* of the Council Chairman, the President, Secretary, Treasurer, Editor, Legal Counsel, Rheumatic Fever Co-ordinator, and Public Relations Counsel were presented.
- *An Institute on Medical Testimony* for doctors of medicine who do not make this work a special field of endeavor, under the sponsorship of the University of Michigan School of Public Health, is to be held in Ann Arbor in October; all MSMS members are cordially invited.
- Report was made that E. W. Schnoor, M.D., Grand Rapids, had been chosen president-elect of the National Association of Boards of Medical Examiners; congratulations were extended to Dr. Schnoor, who is president of the Michigan State Board of Registration in Medicine.

MEDICAL MEETINGS AND CLINIC DAYS

A list of known medical meetings and clinic days, sponsored by county medical societies and other physicians' groups in Michigan, follows:

1953

July 30-31 Annual Coller-Penberthy Medical Surgical Conference — Traverse City

Aug. 20 Third Annual Clinic, Central Michigan Committee, ACS Michigan Committee on Trauma, plus Michigan National Guard Medical Personnel, and Michigan Society of North Central Counties — Grayling

Sept. 22 Michigan Chapter, American College of Surgeons — Grand Rapids

Sept. 23-25 MSMS ANNUAL SESSION — Grand Rapids

Oct. 7 Clara Elizabeth Fund for Maternal Health and Genesee County Medical Society — Flint

Oct. 21 Michigan Cancer Conference — East Lansing

Autumn MSMS Postgraduate Extramural Courses — Statewide

1954

Mar. 10-12 MICHIGAN CLINICAL INSTITUTE — Detroit

Apr. 14 Genesee County Medical Society Ninth Annual Cancer Day — Flint

May 12 Annual Clinic Day and Alumni Reunion of the Wayne University College of Medicine, Hotel Fort Shelby — Detroit

Additions to this list of meetings are invited by the Editor of JMSMS, in order to make this monthly announcement complete and accurate.

Some questions about filter cigarettes that may have occurred to you, Doctor

and their answers by the makers of Kent

Q: What materials are used in cigarette filters?

A: Until just recently, cellulose, cotton or crepe paper were the only materials used in cigarette filters.

Now, after long search and countless experiments, KENT's "Micronite"* Filter has been developed. It employs the same filtering material used in atomic energy plants to purify the air of minute radio-active particles.

Q: How effective are these cigarette filters?

A: Scientific measurements have proved that cellulose, cotton or crepe paper filters do not take out a really effective amount of nicotine and tars.

However, these same tests also have proved that KENT's exclusive Micronite Filter *approaches 7 times the efficiency of other filters in the removal of tars and nicotine* and is virtually twice as effective as the next most efficient cigarette filter.

Q: Do physiological reactions to filter cigarettes differ?

A: The drop in skin temperature occurring at the finger tip induced by filtered cigarette smoke was measured according to well-established procedures. (a, b)

For conventional filter cigarettes, the drop was over 6 degrees. For KENT's Micronite Filter, there was no appreciable drop.

Q: Does an effective cigarette filter also remove the flavor?

A: KENT's Micronite Filter . . . the first cigarette filter that really works . . . lets smokers enjoy the full pleasure of a really fine cigarette, yet gives them the greatest protection ever from tars and nicotine.

In less than a year's time, the new KENT has become so popular it outsells brands that have been on the market for years.

• • •

Today, KENTs are sold in most major U.S. cities. If your city is not yet among them, simply write to P. Lorillard Co., 119 West 40th Street, New York, N. Y., and special arrangements will be made to assure you of a regular supply.

References Cited

a. *J.A.M.A.*, Vol. 103, 1934, p. 318
b. *J.A.M.A.*, Vol. 135, 1947, p. 417

* PATENT APPLIED FOR



Heart Beats


H. L. Smith, M.D.

"It is my hope that we shall be able to continue to broaden the scope of activities of the Michigan Heart Association throughout the State during the coming year, as it is a state association and truly a child of the Michigan State Medical Society," was the keynote sounded by Henry L. Smith, M.D., of Detroit, when he assumed the office of president of the Michigan Heart Association on March 13, 1953.

"I wish to pay high tribute to Drs. Warren B. Cooksey, Paul S. Barker, Douglas Donald and F. Janney Smith who have preceded me in this office. They have done a marvelous job of building this fine organization into one of the leading voluntary health organizations in Michigan today," Dr. Smith continued. "It took much work on their part and united effort and co-operation by many other persons to attain this goal. It is my hope that during my term of office this growth and accomplishment can be continued."

Dr. Smith was elected president of the Association at its Fourth Annual Michigan Heart Day meeting which was held in Detroit in conjunction with the Michigan Clinical Institute, sponsored by the Michigan State Medical Society.

Mr. Charles E. Wilson, Secretary of Defense of the United States, was re-elected chairman of the Board of Trustees of the Association. Mr. Wilson was active in the formation of the Michigan Heart Association and has served as Board chairman since its inception.

Frank Van Schoick, M.D., Jackson, who has served actively in the Association since its organization, was chosen president-elect at the annual meeting.

Other officers elected by the Association at the March meeting were: Vice Presidents—L. Paul Ralph, M.D., Grand Rapids, Mrs. Hugh Wilson, Ann Arbor, and Carleton Dean, M.D., Lansing; Secretary—L. Fernald Foster, M.D., Bay City; Treasurer—Mr. Charles T. Fisher, Jr., Detroit.

F. Janney Smith, M.D., Detroit, the immediate past president of the Michigan Heart Association, will continue to serve on the Board of Trustees, the Executive Committee, and the Research Committee of the Association.

John G. Bielawski, M.D., Detroit, who has served as the Association's executive secretary for the past two years, was appointed to the newly created post of Medical Director of the Heart Association.

The following committee appointments were made by Henry L. Smith, M.D., following his election as president of the Michigan Heart Association:

Research Committee—Douglas Donald, M.D., Detroit, Chairman; Earle A. Irvin, M.D., Detroit; Franklin D. Johnston, M.D., Ann Arbor; E. D. Spalding, M.D., Detroit; L. Paul Ralph, M.D., Grand Rapids; James Fryfogle, M.D., Detroit; Muir Clapper, M.D., Detroit; and F. Janney Smith, M.D., Detroit.

Program Committee—Carleton Dean, M.D., Lansing, Chairman; Warren B. Cooksey, M.D., Detroit; Myer Teitelbaum, M.D., Detroit; M. S. Chambers, M.D., Flint; Robert E. Fisher, M.D., Bay City, J. K. Altland, M.D., Lansing; Ralph L. Fisher, M.D., Detroit; F. D. Dodrill, M.D., Detroit; Roy D. Tupper, M.D., Detroit; and Paul S. Barker, M.D., Ann Arbor.

Finance Committee—Mr. Frank Isbey, Detroit, Chairman; Mr. Charles T. Fisher, Jr., Detroit; and Mr. J. William Hagerty, Detroit.

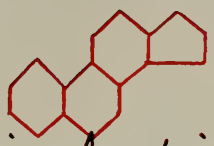
Membership Committee—M. S. Chambers, M.D., Flint, Chairman; Wm. P. Chester, M.D., Detroit; Seymore K. Wilhelm, M.D., Detroit; Donald S. Smith, M.D., Pontiac; S. C. Wiersma, M.D., Muskegon; John D. Littig, M.D., Kalamazoo; and Mrs. Hugh Wilson, Ann Arbor.

Committee on Cardiovascular Clinics—Cecil Corley, M.D., Detroit, Chairman; John M. Murphy, M.D., Detroit; L. T. Colvin, M.D., Detroit.

The Michigan Heart Association is an affiliate of the American Heart Association and a member-agency of the United Health and Welfare Fund of Michigan.

I want to remind you once more that the federal government alone is still taking in taxes 52 per cent of the money we are earning for you as shareholders. I suggest the necessity for continued efforts on your part as well as ours to bring about a more reasonable tax level for enterprises like this one.—H. M. McBain, Chairman of Board, Marshall Field & Company, Annual Report.

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PR REPORT

Current Public Relations Activities of MSMS

Winning Friends

For the most part, people *like* what they *understand*. An overly critical public is usually a poorly informed public. Medicine has a story to tell, and by telling the story properly the profession can gain friends.

The Michigan State Medical Society has many projects and programs available to you to help you tell that story to the people. There are many ways to reach these patients and other friends with your message.

This month a few of the projects and programs available are reviewed. They can be most effective, however, if they are put in operation in your areas by *you*.

Films

The following films were produced in Michigan with the accent on Michigan's medical profession. Each motion picture was designed with a specific purpose in mind. These films should be screened on local television stations and before all groups and organizations in your community.

Film: "To Save Your Life"—16 mm, sound, color, 30 minutes.

Synopsis: "To Save Your Life" is a straightforward documentary of the preparation for medical practice. The picture reveals the long, exacting and costly process every doctor of medicine goes through before he hangs up his shingle. It is excellent as a career counseling motion picture. The film is extremely valuable PR-wise because it also answers two questions: "Are doctors holding down the number of new doctors?" and "Are the doctors worth the money they charge for their services?"

Film: "Lucky Junior"—16 mm, sound, black and white, 10 minutes.

Synopsis: "Lucky Junior" presents the safeguards available to the child of today which are far superior to those of twenty-five years ago. The film shows the modern protective health advantages which today's child enjoys—up-to-date hospitals; immunization against such diseases as whooping cough, diphtheria and tetanus; and services such as the disease control programs, Blue Shield-Blue Cross, et cetera.

Film: "To Your Health"—16 mm, sound, black and white, 10 minutes.

Synopsis: "To Your Health" is a frank discussion of compulsory health insurance. A newspaper reporter questions all types of persons about government medicine. His questions are to the point and the answers highlight the main arguments on socialized medicine.

Film: "Your Doctor"—16 mm, sound, black and white, 15 minutes.

The American Medical Association has produced a motion picture called "Your Doctor." It is now available for 16 mm screenings to community groups, but it is not cleared for television. The fifteen-minute sound motion picture points out that good health is a precious possession. It considers the vital contribution made by doctors of medicine in their unremitting study to maintain the health standards of the nation. The film also shows the rigorous study and work required in medical schools and how physicians continue their education throughout a lifetime.

These four motion pictures can be scheduled by contacting the Michigan State Medical Society, Box 539, Lansing, Michigan.

Radio

Although the popular five-minute authentic health program, "Tell Me, Doctor," has been withdrawn from specialized distribution, the programs are still available for broadcast on radio stations in your community.

There are more than 1,600 programs recorded on a wide variety of topics ranging through the ultra scientific to the most practical socio-economic. A number of Michigan radio stations are being supplied with the transcriptions from MSMS in Lansing. You can arrange for them on your local radio station(s).

Pamphlets and Publications

Your waiting room is an excellent place for pamphlets which tell the story of the medical profession. These pamphlets can be obtained at no cost to you by writing the MSMS in Lansing.

To answer questions from the youth of your community regarding careers as Medical Associates, there is the nationally known brochure, "In Planning Your Career." This pamphlet was prepared by MSMS.

Other pamphlets developed by the AMA are available through the MSMS and include: "Your Doctor for a Friend," "Which Way America," "A Doctor for You," "Your Money's Worth in Health." They each tell an important medical PR message. All of them present information in an attractive and readable fashion.

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Jaundice

By Philip Thorek, M.D.
Chicago, Illinois

TO CO-ORDINATE and simplify the subject of jaundice is imperative so that with the diagnostic armamentarium at hand a diagnosis may be readily reached and proper therapy instituted. An understanding of the pathologic physiology results in a more rapid and accurate diagnosis and it is with this in mind that the subject is presented.

Physiology

The normal erythrocyte eventually terminates its existence by being broken down in the spleen, where the disintegrated red cell is divided into an iron-containing part (hemosiderin) and an iron-free part (hematoidin). The iron-free part is the precursor or mother substance of the main bile pigment called bilirubin. As the iron-free part of a broken down red corpuscle is delivered from the spleen to the general circulation it comes in contact with the reticuloendothelial system, which is a specialized network of cells arranged around the vascular system. These cells have the ability of converting the iron free part of the red cell into bilirubin. This bilirubin is attached to a heavy protein molecule, hence it is designated as bilirubin proteinate, in which form it is delivered to the liver. The liver splits the bilirubin proteinate and excretes pure bilirubin via the hepatic duct into the gallbladder. When the gallbladder contracts, bilirubin is delivered into the intestinal tract, where it is acted on and broken down by bacteria to its end metabolite known as urobilinogen (urobilin). Some of this urobilinogen passes out and colors the feces; the remainder is absorbed from the intestinal tract and is carried back to the liver via the portal system. One of the many functions of the liver is to reconvert the end product urobilinogen back to its early predecessor, bilirubin.

Clinical Classification

A classification which has served well is one which divides jaundice into the following types: (1) prehepatic, (2) intrahepatic and (3) posthepatic. With this classification one can place the lesion as to its location before the liver, in the liver or after the liver.

Prehepatic Jaundice.—A typical example of icterus which develops from a prehepatic lesion is familial hemolytic icterus. In this condition the red cells are apparently defective and, instead of being the usual normal biconcave disks, appear as "golf ball" red cells. Since they are also smaller than the normal cells the condition has been referred to as microcytic spherocytosis. These cells have an increased fragility and rupture easily. As a result of this exaggerated bursting process, an excessive amount of iron-free pigment is excreted by the spleen, resulting in an excessive amount of bilirubin proteinate, which is formed by the reticuloendothelial system. This results in jaundice, because of hyperbilirubinemia. However, since this bilirubin is in the form of a proteinate and since this molecule is too heavy to pass through the kidney, the urine does not show the color that one would expect in the jaundiced patient (acholuric jaundice). Since an increased amount of bilirubin is being delivered to the liver, a greater amount of bilirubin is excreted

From the Departments of Surgery, University of Illinois, Cook County Graduate School of Medicine, Cook County Hospital, and American and Alexian Brothers' Hospitals.

Presented at the Eighty-seventh Annual Session, Michigan State Medical Society, Detroit, September 26, 1952.

into the intestines; this results in an increased formation of urobilinogen in the intestinal tract. Not only is this large amount of urobilinogen excreted in the feces, but the remainder is returned to the liver. The liver converts as much of this as it can into bilirubin, but the remainder overflows into the urine, resulting in an increased urobilinuria. Should the Ehrlich aldehyde test for urobilinogen be applied to such a urine, the result would be strongly positive; however, results of liver function tests would be negative. The van den Bergh test is of some value here, since a prehepatic jaundice gives a positive indirect and negative direct reaction.

Other examples of prehepatic jaundice are icterus neonatorum and hypersplenism. In the former, too many red blood cells are destroyed, and in the latter the spleen is hyperactive.

Intrahepatic Jaundice.—Although this type is located in the liver, it is important to remember that the entire liver does not become involved at once; death would promptly ensue if this were to occur. Any toxin, be it chemical or bacterial, or any organism may so injure the liver that one or more of its important functions might be interfered with. Typical examples would range anywhere from a viral hepatitis to a fulminating acute yellow atrophy. When the liver is damaged, one or more of the liver function tests show signs of hepatic dysfunction. Many workers in this field have their favorite liver function test or group of tests; for practical purposes the author prefers to confine himself to the aldehyde test for urobilinogen and the cephalin flocculation test of Hanger. If the lesion producing the jaundice is intrahepatic, then both of these tests elicit positive reactions.

Posthepatic Jaundice.—In jaundice caused by a posthepatic lesion it is assumed that the prehepatic and intrahepatic functions are progressing normally. Examples of posthepatic jaundice are: stones in the common duct, carcinoma of the common and hepatic ducts, carcinoma of the head of the pancreas and metastases to the porta hepatis.

The obstruction to the flow of bile into the intestinal tract may be partial or complete. If the obstruction is partial, then some bilirubin gets into the intestinal tract and this is converted to urobilinogen. That urobilinogen which returns to the liver will be converted back to bilirubin, since the lesion is not an intrahepatic one, and the aldehyde reaction for urobilinogen will be negative. If, on the other hand, the obstruction to the outflow of bile is complete then no bilirubin gets into the intestinal tract and no urobilin is formed; therefore, the aldehyde reaction will again be negative. Liver function tests in posthepatic jaundice reveal normal functioning livers unless the jaundice has been present well over a month and is of a severe degree; a biliary cirrhosis then forms.

Diagnosis

In evaluating the diagnostic possibilities in each case of jaundice nothing can replace the recording of a careful and accurate history. A detailed and keen physical examination is equally revealing. A large gallbladder in the absence of jaundice usually suggests a cystic duct obstruction (mucocele of the gallbladder); a small gallbladder plus jaundice usually indicates a stone in the common duct, and, finally, jaundice in the presence of a large gallbladder indicates a carcinoma of the head of the pancreas (Courvoisier's law). One can also differentiate the various sites of carcinoma which involve the biliary tract. For example, in carcinoma of the gallbladder, jaundice is not present but a hard nodular mass which moves with respiration is palpable in the right upper abdominal quadrant; in carcinoma of the common duct, jaundice plus a portal vein complex (ascites, dilated esophageal varices, hemorrhoids) is present; carcinoma of the ampulla of Vater is suspected when one finds jaundice plus signs of pancreatic insufficiency, and, finally, carcinoma of the head of the pancreas can be diagnosed when jaundice plus an inferior vena cava complex (bilateral dependent edema and dilated veins of both inferior extremities) are noted.

The differentiation between a stone and a carcinoma of the common duct may not be too difficult; however, it should be remembered that, in contradistinction to the usual conception, a carcinoma may produce colic and a stone may be silent. Taking an icterus index on five successive days might clarify the diagnosis. If the lesion is a carcinoma, the icterus index is high and continues to rise; however, it is possible for an icterus index to drop if there is some slight ball-valve action in the presence of a stone.

Unfortunately pruritus (itching) is considered to be a symptom of jaundice; this is erroneous.

Pruritus is a symptom of posthepatic (obstructive) jaundice. When the patient's primary complaint is his itching, then he is probably suffering from either a stone or a carcinoma which is involving the extrahepatic biliary passages. Rarely does a patient with intrahepatic jaundice complain of itching.

The pulse is usually slow in cases of icterus. A bradycardia is preferred in such cases, because when the pulse becomes rapid it usually forebodes an oncoming acute yellow atrophy or hepatic decompensation.

Of the numerous laboratory tests at one's disposal, the author prefers the Ehrlich aldehyde test for urobilinogen and the cephalin flocculation test. If the lesion is a prehepatic one, the urobilinogen reaction is positive and the reaction to liver function tests are negative; if the lesion is posthepatic, both of these results are negative. No tests are foolproof; however, the statements just made are found to be true in the vast majority of cases.

It seems to be a waste of time, effort and money to do a Graham-Cole test in jaundiced patients. The negative response found in these patients is most misleading. On the other hand, a flat roentgenogram of the abdomen is always taken. Just a few of the tests available to the clinician have been discussed; however, one should always keep in mind that, since no test is foolproof, diagnostic pitfalls are always present.

Treatment

To classify and discuss the treatment of jaundice under the headings of medical and surgical jaundice seems both impractical and misleading. When a patient with jaundice is seen one never knows whether the condition will eventually require a medical or a surgical regimen, and since the two types of therapy overlap, it seems preferable to consider them together. Only the salient parts in the therapy will be mentioned.

Preoperative care is a major factor if a jaundiced patient is to be brought through a surgical procedure successfully. Some of the necessary essentials include electrolyte, water and protein balance; vitamin therapy, especially vitamins K, B and C, and an adequate glycogen supply to the liver. The severe pruritus which may be associated with jaundice can sap much of the patient's strength and energy. Recently the author has used intravenous injections of procaine hydrochloride in a 0.1 per cent concentration and has found that this gives rather rapid, pronounced relief from itching in most instances. One thousand cubic centimeters of this solution is given at a rate never exceeding 1,000 cc. in one hour. A word of caution, however, should be mentioned; since the drug is a convulsant, its use in concentrated solutions or rapid injection of dilute solutions may produce irreparable damage. Blood transfusions should be utilized not only as an operative or postoperative measure but also as a method of supplying many of the previously mentioned needs. Preoperative laboratory tests, such as blood cell counts, determinations of icterus indexes, prothrombin, bleeding and coagulating times, blood protein determinations, computing of albumin-globulin ratio and others, are all of value. However, none of these replace the clinical impression gained by the seasoned diagnostician as he watches his patient through this "build-up" period.

Many operative procedures, both curative and palliative, have been described for the jaundiced patient; the type of lesion determines the type of operation. Since metastases do not determine operability or inoperability, the only determining factor is fixation of the primary growth to surrounding vital structures. If the primary lesion is not fixed to a vital structure, even in the presence of operable metastases, we feel that Brunschwig's idea in attempting to remove as much of the malignant tissue as is possible is a valid one. Alexander has further stressed this point by suggesting the removal of solitary pulmonary metastases. The monumental work of Whipple in carcinoma of the pancreas has brought those conditions which were considered inoperable only a few years ago into the realm of operability.

To discuss the surgical therapy of the common duct one must be conversant with the surgical anatomy of this structure. It is simple and practical to consider the common duct as being divided into four parts, each being related to the duodenum. Therefore, the common duct is divided as follows: part one, supraduodenal portion; part two, retroduodenal portion; part three, infraduodenal portion (pancreatic); part four, intraduodenal portion.

Regardless of where the stone is located, only part one is immediately accessible to the surgeon; therefore, the incision is placed here. A stone in either part one or part two is usually easy to remove by means of a supraduodenal choledochostomy. The author prefers to drain the common

duct rather than to close it, because in the presence of edema and infection one never knows when a suture might cut through. A stone located in part three causes no concern if it is not embedded in the duct wall. If the stone is freely movable, it can be dislocated into part one through a supracholedochal incision. However, if the stone has become firmly fixed in an ulcerated and edematous part of the duct wall, it cannot be dislodged. Some surgeons advocate mobilization of the duodenum to remove such a stone. Since this part of the common duct passes through the head of the pancreas and not between the pancreas and duodenum and since this area is surrounded by a cage of vessels (superior and inferior pancreaticoduodenalis arteries), this maneuver seems impractical and at times is impossible. It is of value only when the stone has eroded through the duct and the head of the pancreas; this is unusual. A preferable method to handle such impacted stones in part three is the following one: The flat roentgenogram which must be in the operating room is studied; it is noted that this is a flat film, and no dye has been given. If the stone is not seen on this flat roentgenogram, it is concluded that it is a cholesterol stone. If such is the case then a catheter, not a T-tube, is placed from part one of the duct downward to the stone; this is sutured into the common duct. In twenty-four to forty-eight hours, a few drops of ether are injected into this catheter every morning and every evening. Since cholesterol is soluble in ether, most of these stones will dissolve and disappear without further manipulation. If, on the other hand, the impacted stone in part three is seen on the flat roentgenogram, it is concluded that it is high in calcium content, and this usually is not affected by the etherization method of treatment. In such an instance a short-circuiting operation is done to relieve the jaundice, which, after all, is of far greater and immediate importance than the presence of a stone. The procedure preferred is a cholecystojejunostomy. This brings up the necessity of determining whether or not the common duct should be explored. Such a decision must be made prior to performance of a cholecystectomy, since if the gallbladder is removed and then one finds it necessary to do a short-circuiting procedure it usually is more difficult to do a choledochojejunostomy than to do a cholecystojejunostomy. The indications for exploring the common duct are too well known to warrant repetition here. If an indication is present, the common duct is explored, the necessary procedure carried out and the gallbladder removed if there is no need for its utilization in an anastomotic procedure. A stone in part four is also approached through an incision in part one. Occasionally such a stone will dilate the ampulla of Vater, and then it can be pushed into the duodenum. If this is impossible, the middle of the descending portion of the duodenum is opened and the stone is extracted transduodenally. The duodenum is then closed.

Drains in the common duct can be removed when one is certain that bile is flowing freely into the duodenum. This can be determined by means of roentgenography with a contrast medium, tying off the tube or inspecting the color of the feces. Although common duct tubes have been removed anywhere from a few days to many months postoperatively, the author is of the opinion that the average common duct tube should be removed somewhere within a two and four week period.

There are cases in which it is impossible to determine preoperatively whether the condition is due to a stone or to a neoplasm and whether or not the latter is operable. Although some conditions might appear inoperable preoperatively, the patient should not be denied at least the chance of an exploratory operation. Occasionally a life can be saved by removing a stone which was thought to be a neoplasm or by removing a neoplasm which was thought to be nonresectable.

The postoperative management is as vital to a successful result as is the operative procedure itself. This part of the treatment is not relegated to the uninitiated but is preferably handled by some one thoroughly conversant with the modern approach to this all-important phase of therapy.

Summary

To thoroughly understand the subject of jaundice both diagnostically and therapeutically the pathologic physiology of the metabolism of the bile pigments must be clarified.

Classifying jaundice into three groups, namely, prehepatic, intrahepatic and posthepatic, has been advantageous clinically.

To standardize the various procedures applied to common duct surgery the common duct is divided into supraduodenal, retroduodenal, infraduodenal and intraduodenal portions.

Recurrent Acute Intussusception

By John E. Summers, M.D.
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INTUSSUSCEPTION is the most frequent and the most important acute abdominal emergency encountered in infants from three to eleven months of age," according to Ferrer.[2] While acute intussusception in infants is not infrequent, recurrent acute intussusception is rare. Gross and Ware[4] reporting on, "Experience from 610 cases," did not mention recurrent acute intussusception. Gibson, Dockerty and Dixon[3] reported fifty-five patients with acute intussusception with one recurrence. Snyder and Kraus[7] found one known recurrence among 143 consecutive cases occurring in infants and children. Oberhelman and Condon[5] found that three patients out of a series of ninety-five had recurrent acute intussusception. They[5] state: "In one patient the first intussusception was reduced by a barium enema, but recurred one week later at which time reduction was made by operation. In the second patient the first intussusception was reduced by operation and at the same time an appendectomy was performed. Four days later the second intussusception occurred, and, at surgery, the invaginated appendiceal stump was found to be the apex of the intussusception. In the third patient the first intussusception was reduced surgically. Six months later a recurrence developed which was reduced by a barium enema.

"Three weeks later a second recurrence developed which was then reduced surgically. At this time a Meckel's diverticulum was found. This was probably the cause of the recurrence in the third patient." While the majority of incidences of acute intussusception occur in healthy males under two years of age it may occur in either sex at any age. The etiology of intussusception in infants is not known whereas in adults it is usually due to a tumor, Meckel's diverticulum or an ulcer. Of vital importance is the early diagnosis of the disease before irreducibility and strangulation of the intussusception develop. This is shown by Gross and Ware[4] in Table I.

TABLE I. RELATION BETWEEN MORTALITY AND DURATION OF SYMPTOMS

Duration of Symptoms Hours	Mortality 1928-1939	1940-1947
Less than 24 hours	0%	0%
24-36 hours	23	9
36-48 hours	33	13
48-72 hours	21	15
72-96 hours	38	15

A few workers[6] have reported good results in the reduction of acute intussusception by means of barium enema. A certain number of the patients so treated will require supplemental surgery in order to complete the reduction. Surgical intervention, however, is generally accepted as the treatment of choice. The head of the intussusception is milked backward along the colon until the mass can be delivered outside the abdomen where the reduction can be completed under visual control. In those cases which have become irreducible or gangrene has supervened the aseptic, Mikulicz resection as recommended by Gross and Ware[4] is probably the safest procedure although resection and primary anastomosis, in the hands of experts,[1] reportedly gives excellent results.

Case Report

First Hospitalization.—A nine-month-old white male infant was brought to the hospital at 10 p.m., October 13, 1951. The mother stated that at approximately 4:30 p.m., October 12, 1951, the infant began having attacks of screaming which appeared to be due to abdominal pain. With each attack he would be "doubled up" with pain, but after a minute or so the attacks subsided and he appeared normal. These attacks continued intermittently through the night.

Vomiting developed during the evening and since then he had not been able to retain anything. Blood streaked stools were passed the morning of admission (October 13, 1951). The past history was negative. The child had never been sick before.

Physical examination revealed a normal appearing, well-developed, well-nourished infant. Rectal temperature was 99°F., pulse 120, and respirations 26. His skin was flushed and dry. The superficial lymph nodes were not enlarged. The head was symmetrical with no deformity. The eyes appeared to be normal. The ear drums were clear, gray and glistening. The nose presented no discharge, deformity or obstruction. The lips and mouth presented no lesions. The tonsils were small and the pharynx was clear. The neck presented no masses, tenderness or rigidity. The chest was normal in size and shape. The lungs were resonant throughout with vesicular respiration; no râles, rubs or wheezes were heard. The heart had a regular rhythm with no enlargement or murmurs.

During a one hour period of observation the patient had four attacks characterized by screaming, partial

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flexion of the trunk and rigidity of the abdominal wall. With the abrupt cessation of the attack he would fall asleep, the abdominal wall relaxed, and a definite mass in the right upper abdominal quadrant could easily be palpated.

The genitalia were normal. Rectal examination revealed no mass. An enema was returned blood streaked. The extremities were normal.

A diagnosis of ileocolic intussusception was made and immediate operation advised.

Preoperative Preparation.—An infusion of 5 per cent dextrose in physiological saline was started in the left great saphenous vein above the ankle. Atropine, gr. 1/400, was given hypodermically.

Operation.—The operation began at 2:10 p.m., and ended at 3:30 p.m., October 13, 1951. Open drop ether anesthesia was used.

The abdomen was entered through a long right paramedian incision, the right rectus muscle being retracted laterally. Exploration of the abdomen showed that the terminal ileum, vermiform appendix, the cecum and the first part of the right colon constituted the intussusceptum; the right colon and the transverse colon constituted the intussuscipiens. The head of the intussusceptum had progressed to the splenic flexure of the colon. The first part of the reduction was performed intra-abdominally by milking the head of the intussusceptum backwards. The reduction of the terminal part was accomplished under visual control.

The cecum, appendix and terminal ileum were dark in color and edematous; healthy color returned to the bowel after warm packs were applied for a few minutes. The vermiform appendix appeared congested and edematous, so it was removed. The mesenteric lymph glands were markedly enlarged. One of these glands was removed for microscopic examination. Careful palpation of the terminal ileum, cecum and ascending colon revealed no tumor, Meckel's diverticulum or ulcer. The abdomen was closed in layers using a continuous suture of No. 0 chromic catgut on the peritoneum and posterior rectus sheath and interrupted No. 4-0 cotton sutures on the anterior rectus sheath and skin. The patient withstood the procedure well and was returned to bed in good condition.

Pathologist Report.—This report revealed the following: F-2684, lymph node, acute inflammatory hyperplasia and marked passive hyperemia; F-2694, a juvenile appendix.

Postoperative Course.—The postoperative course was remarkably smooth. There was no further vomiting. Milk and fluids were resumed the first postoperative day. On Oct. 20, 1952, the skin sutures were removed and the patient discharged to return for follow-up studies.

Final diagnosis was: Acute ileocolic intussusception.

The patient was examined at intervals after discharge from the hospital. Growth and development proceeded normally and no further complaints were noted.

Second Hospitalization.—The mother stated that the child had been perfectly well until the morning of April 21, 1952, when it was noted that he appeared ill; he began having paroxysmal attacks of abdominal pain similar to his previous illness. Vomiting occurred and he was unable to retain fluids or food. Several blood streaked stools were passed.

Physical Examination.—Rectal temperature was 103° F., pulse 120, and respirations 24.

The patient, a sixteen-month-old-boy, was well developed and well nourished but appeared slightly dehydrated. He was drowsy and slept quietly. Complete examination was negative except for the abdomen. He was observed over a forty-five minute period. During this interval he had five attacks characterized by screaming, partial flexion of the trunk and marked rigidity of the abdominal wall. An attack lasted approximately two minutes and subsided abruptly whereupon he fell asleep.

During sleep the child was relaxed, the abdominal wall was soft and a mass in the right upper abdominal quadrant was easily felt. An enema was returned blood streaked. The diagnosis of recurrent acute ileocolic intussusception was made and immediate operation advised. An infusion of 5 per cent dextrose in physiological saline, intravenously, was started. Atropine, gr. 1/300, hypodermically, was given.

Operation.—Operation began at 12:20 a.m., and ended at 1:00 a.m., April 22, 1952. Open drop ether anesthesia was used.

The incision was a right paramedian one through the previous operative scar. The right rectus abdominis muscle was retracted laterally and the abdomen entered. Exploration revealed an ileocolic intussusception with the head of the intussusceptum in the transverse colon. It was gently reduced by exerting pressure on the head of the intussusceptum thus milking it backward. The reduced intussusception was not strangulated but the terminal ileum and cecum were edematous and congested. Careful palpation of the terminal ileum, cecum and colon failed to reveal tumor, diverticulum or ulcer.

The abdomen was closed in layers using a continuous suture of No. 0 chromic catgut on the peritoneum and posterior rectus sheath. No. 4-0 cotton, interrupted suture, was used on the anterior rectus sheath and the skin.

The postoperative course was uneventful. The temperature returned to normal after forty-eight hours. There was no further vomiting and normal feeding was resumed. He was discharged on the fifth postoperative day (April 26, 1952) and returned for removal of skin sutures on April 29, 1952. His subsequent course has been normal.

Conclusion

Acute intussusception must be diagnosed early and treatment instituted. Children under two

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Psychodynamic Aspects of Peptic Ulcer

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THE ASSOCIATION of peptic ulcer symptoms with periods of emotional stress was recognized by discerning clinicians long before the concept of psychosomatic medicine evolved. It is well established here that emotion interferes with normal digestive processes. Beaumont observed in his classic study that fear and anger were among the factors associated with inhibition of gastric secretion. Hornberg, Bogen, and Schrottenbach reported diminution in gastric secretion as a result of anger or vexation, with each of these authors performing his experiments on subjects with gastric fistulas. Heyer showed that a brief period of emotion, euphoric or dysphoric, produced in hypnotized volunteers by suggestion (i.e., talking about war experience, choking, railroad accident, winning a lottery, et cetera), resulted in a reduction of the secretory response to suggested food. Wittkower's observations can be summarized as follows: (1) similar effective stimulations in a given subject cause similar changes, (2) similar emotions cause various changes in different subjects, (3) various emotions cause similar changes in the same subject. There are certain individuals who react with increased acidity regardless of emotional state, while in other subjects the changes are manifested in the volume, without alteration of the acidity.

Until comparatively recent times, it has been maintained that peptic ulcer is particularly susceptible to aggravation by emotional disturbances. Bergman proposed in 1933 the theory that peptic ulcer is caused by an imbalance of the autonomic nervous system. The effects of this imbalance are manifested in the stomach by spasm, ischemia, damage to the mucous membrane, and peptic digestion of the devitalized area. The resulting acute lesion initiates further spasm, thus establishing a vicious cycle which leads to a chronic ulcer. In brief, we have moved through the period when psychic trauma was considered to affect adversely an existing ulcer to the present-day concept that psychic disturbances cause peptic ulcer. The first formulation as to the common denominator of emotional status of peptic ulcer patients was suggested by Draper's work in 1927 as to the relationship of "chronic fear" in the production of the psychic pattern in peptic ulcer. He observed that there was evidence in the psychological as well as in the morphological panel of ulcer patients that maleness was the essential feature. These observations were considered to be consistent with the fact that the incidence of peptic ulcer is much higher in males. Draper, who was influenced by Crile's report on the relation of hyperthyroidism in peptic ulcer, stated that it was commonly known that exophthalmic goiter and hyperthyroidism are from six to eight times more frequent in women than in men, and that in view of these considerations it would appear paradoxical that more men than women should be affected with ulcer. The only explanation for this paradox seemed to be in the fact of femaleness within the male. Draper continued with the statement, "A man who possesses that degree of femaleness which threatens the authenticity of his essential maleness becomes subjected to deeprooted, unconscious fears lest he fail in his attempt to play successfully the masculine role in life." It appeared that unconscious awareness of the feminine component might be a stimulus to the over-exploitation of their virility which is so characteristic of ulcer bearers. Draper concluded with his views concerning "the persistent hold on mother principle and fear of loss of mother surrogate's approval," which appeared to be the most consistent source of fear in the group he studied. It was believed that when one read the intimate histories of persons who had ulcers, "the impression developed that these individuals, like frightened neglected children, are striving continually to recapture and maintain the mother principle which had ministered so meticulously to the demands of that delicate infant receptacle for milk." So, "fear," "fright," "frightened" are the words recurring throughout Draper's discussion of the psychic status of peptic ulcer patients.

The painstaking investigations of Todd on the physiology of the human stomach are significant as the turning point in the concept of the effects

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of emotion on gastric motility. Extensive radiographic observations on medical students enabled Todd to discern characteristic motility patterns for various affective states. He showed that sudden or transient dysphorias, such as mental shock, acute disappointment, fear or depressing emotional strain, are accompanied by decreases in gastric tonus and weak or absent peristalsis. On the other hand, he showed that in the anxiety complex the stomach always manifested hyperactivity. He stated that since there was no distinction in pattern between this hyperactivity and that which precedes pyloric or duodenal ulcer, precautions should be taken to determine its transient or quasipermanent form. McGregor stated in 1938 that there was enough evidence to show that gastric peristalsis and secretion are arrested in man not only by worry, anxiety, fright, fear, and the major affective states, but also by much finer shades of feeling.

One of the approaches regarding the relationship between hypersecretion and peptic ulcer in experimental animals was based on Pavlov's demonstration that if a pain stimulus be associated with the giving of food, the usual inhibitory effect of the pain on salivary secretion eventually disappears, and the pain stimulus may even become a conditioned excitor of salivary secretions. Pavlov's interpretation of this phenomenon was that there was a transference or alternation of direction, and an attraction of energy from one center to another. This is not essentially different from the dynamic interpretation of the psychic origin of somatic symptoms, namely, that repressed emotional energy flows into the vegetative centers. The physiological anatomy on which the concept of psychogenic stimulation of gastric secretion is based warrants consideration. It is an established fact that the vagus nerve carries excito-secretory impulses to the fundic glands of the stomach. It has been tacitly assumed that the stimulation of gastric activity by emotional states also utilizes the vagal pathway. (The work of Claude Bernard, Cushing of posterior fossa lesions, Fulton's neurophysiological studies on extirpation of the frontal lobes, can be quoted.) Presuming that the vagi are the nervous route for the transmission of these effects, we may now ask, how can affective states produce vagal stimulation? The excitation of the autonomic nervous system which characteristically accompanies emotional reactions is considered to be due to stimulation of autonomic centers located in the hypothalamus. The hypothalamic centers are under the control of higher centers in the thalamus and cortex. Thus, in the case of psychogenic stimulation of gastric secretion under conditions of emotional stress, it may be presumed that the parasympathetic centers in the hypothalamus are activated by impulses controlled by the thalamus and cortex. The stimulation of gastric secretion by emotional states acting over the vagal pathway has often been termed a type of "psychic secretion." Ivy proposed that the term "cephalic" phase of gastric secretion be used to designate the secretion which occurred in response to stimuli acting subcortically. As has been illustrated, gastric secretion can occur in response to sham-feeding in the absence of the cortex.

Alexander pointed out that studies by internists and physiologists fall short of an accurate evaluation of the deeper psychological forces obtained in a given patient. The psychosomatic theory of the etiology of peptic ulcer is based on three main premises: (1) That most ulcer patients manifest a characteristic personality pattern or conflict-situation; (2) that this emotional status is accompanied by hypersecretion and hypermotility of the stomach; and (3) that hyperactivity of the stomach leads to peptic ulcer. Alexander formulated a definite hypothesis regarding the basic psychological personality problems in peptic ulcer patients. In brief, the essentials of the three assumptions which have to do with repressed oral-receptive tendencies are that, first, the psychic factors causative of the somatic disturbance are of a specific nature; secondly, that conscious psychological processes play a subordinate role in the causation of somatic symptoms, since such conscious emotions and tendencies can be freely expressed and relieved from the voluntary nervous system; and thirdly, that the patient's actual life situation has usually only a precipitating influence on the disturbance. It was therefore assumed that there was to be sought in these patients not a distinctive personality pattern, but rather a typical conflict-situation, and the aim of Alexander's study was to identify this conflict. However, clinical observation has shown repeatedly that in many peptic ulcer patients the outward appearance of self-control is carefully maintained. Alexander stated further that although certain personality types might be more likely to become involved in this conflict-situation, he has observed that under appropriate circumstances other types of character may develop the

same conflict. Mittelman and Wolf found a wide range of personality types in thirty patients. However, all shared a common characteristic reaction pattern which consisted of intense anxiety, insecurity, resentment, guilt and frustration.

The most obvious feature of the pathological physiology of peptic ulcer is hyperactivity of the stomach in both its motor and secretary functions. The hyperactivity can and does accompany emotional states or conflict-situations, and the relationship can be envisioned as follows: "If the intense wish to receive, to be loved, to depend upon others, is rejected by the adult ego and consequently cannot find gratification in normal life relations, then only the regressive pathway remains open; the wish to be loved becomes converted into the wish to be fed. The repressed longing to receive love and help mobilizes the innervations of the stomach, which are since the beginning of the extra-uterine life closely associated with the most primordial form of receiving something, namely, with the process of receiving food. These innervations serve as a chronic stimulus of the stomach and are independent of the normal organically conditioned stimulus, namely, the need of food: this stimulus has its origin in emotional conflicts entirely independent of the physiologic state of hunger. Those individuals who on account of the described conflict-situation have to repress and abnegate their overstrung receptive cravings express them in the tacit physiological language of the stomach functions. Such a stomach behaves all the time as if it were taking or were about to take in food." It has been suggested that an excessive secretion of the stomach under stress may be a manifestation of an attempt to resolve hostility and to gain security through eating. These hypotheses imply that certain displeasurable affective states cause an augmentation of gastric activity—a change hitherto considered to be associated only with pleasurable feelings. There is extensive literature regarding observations as to secretion or motility, or both, under conditions of emotional stress in both animals and man. Contrary to the findings in the gastric fistula case of the patient named Tom reported by Wolff, in animals it was found that the only effect of dysphoric emotional states on gastric functions was inhibition, regardless as to whether or not the emotion was one of fear, anger, or frustration, with the effects being the same—namely, a decrease in glandular and muscular activity of the stomach.

Since it was believed that the whole problem lies not in personality types, but in the nature of the specific emotional conflict, individuals with a specific personality type probably tend toward similar emotional conflicts. However, in this research an attempt was made to determine the specific emotional conflicts residing in the fundamental personality type, with an attempt to ascertain the emotional undercurrents and to measure the precipitating factors in physiological units. Since the environmental setting seems to show a relationship with the conflict-situation, our study included a sociological evaluation, as did Ivy's.

Ivy and his co-workers reported in their recent volume on peptic ulcer that this condition was found more commonly in certain occupations than in others, and was related to irregular living habits or prolonged or chronic nervous tension, anxiety and fatigue. The statistics used by Ivy show that death from peptic ulcer reached their peak in the midwinter and were lowest in August. Among the chronic diseases of the United States in 1937, peptic ulcer ranked tenth as the cause of death, twelfth as the cause of lost work days, fourteenth as to cause of invalidism, and twentieth as to number of cases. The incidence in the Army of the United States during World War II was 0.3 per cent. The mortality from the disease is relatively low, since it has accounted for only 0.68 per cent of the deaths in the United States since 1936. Less than 5 per cent of the peptic ulcer patients die from a complication of the disease, such as perforation, and the mortality is probably less since the advent of antibiotics and sulfonamides. Since World War II, the clinical and mortality statistics show that an increase in the incidence of peptic ulcer has occurred throughout the world. Sex as a constitutional factor which affects susceptibility to peptic ulcer is clearly established, with the ratio of four males to one female after ten to fourteen years, and the ratio increasing to eight to one beginning with the second decade. The external environment has been a factor evaluated in the light of the occupation. In England, the incidence of duodenal ulcer and mortality from it were greater among the men in high social classes, with large incomes, and in administrative or professional positions with great responsibilities. The incidence of gastric ulcer and the mortality from it were higher in skilled labourers. Women who took responsible skilled or semi-skilled positions had as high a rate as any group of

men. Salesmen and vehicle drivers who were exposed to nervous tension, with irregular eating habits, had the same incidence as those in the group of administrators. The incidence of ulcer is higher in urban than in rural populations. Difficulties with finances, working conditions or relatives are more frequently an event associated by the patient with the onset of ulcer than with the onset of some other physical disturbance. Exposure to cold and dampness was given by patients as a cause of recurrence. In the United States, the death rate from peptic ulcer is higher among divorced, widowed and single males than among married males. During the period of heavy air-raids over London, the death rate from peptic ulcer increased. There is evidence to show that when a population is exposed to an environmental situation with sustained anxiety, there is an increase in the number of perforations and hemorrhages.

From the physiological point of view, caffeine stimulates gastric secretion in man and acts synergistically with histamine. Like histamine in very large doses, this produces gastric ulcer in cats. Therapeutic applications using histamine are based on the assumption that some fundamental sensitivity exists which can be neutralized by desensitization. In an allergic reaction, histamine is probably not the primary factor involved, but is the biochemical released secondarily into some disruptive process within the cell. Coagulation time is shortened as the result of increased platelet activity in the patients receiving intravenous injections of histamine. Vagotomy decreases gastric secretion and motility, and in most cases achlorhydria will develop as a result of administering histamine, although total acidity may remain unchanged. In the normal individual, an insulin-produced hypoglycemia will cause a sharp rise of both free hydrochloric acid and total volume of gastric secretion. However, if both vagi have been completely severed, this effect will not take place. This test has been used to determine the completeness of bilateral vagotomy. Following vagotomy, most sensations arising in the gastro-intestinal tract persist, the appetite is appreciated normally, and sensations of heat and cold—as tested by application of hot or cold water to the stomach—are readily perceived. Following vagotomy, over-distention of the stomach causes the usual feeling of distress, and traction of the stomach following vagotomy by introducing a gastroscope beyond the usual depth results in pain. The pain pathways are obviously interrupted by vagotomy, since there is immediate and complete relief of ulcer pain. Ivy pointed out the role of hormones in preserving the delicate balance of the digestive tract, suggesting that some hormones both inhibit gastric acidity and influence the protective mucous coating of the stomach and duodenum Alcohol in 7 per cent concentrations or greater stimulates gastric secretion and irritates the mucous lining; while caffeine irritates an existing ulcer, since it stimulates acid and pepsin secretion. Experimental chronic ulcer heals quickly if not exposed to gastric contents, and healing can be delayed by the injection of histamine which produces angio-toxic changes in the stomach wall. Among other etiological factors are the mechanical ones of experimentally induced pyloric stenosis, also the etiological role of rough food producing ulcer in the vagotomized rabbit—whereas a soft diet reduces the incidence of peptic ulcer by 5 per cent. Vascular disturbances resulting in the impairment of blood supply of the mucosa, without interfering with the secretory function, may result in the formation of an erosion or an acute ulcer. Infection, toxic factors, allergy, nutritional deficiency such as absence of protein in the diet of experimental laboratory animals, acute or subacute adrenal or thyroid-parathyroid insufficiency, and injection of large doses of pituitrin can produce ulcer. The reason for the beneficial effect of pregnancy on ulcers has not been adequately explained. It may have something to do with the decreased secretion of gastric juices. Experimentally, it has been shown that continuous stimulation of the vagi for several minutes to an hour will cause acute lesions in the stomach. There is some evidence to show that ulcer formation may be due to a decrease in the defensive properties of the mucosa rather than the experimentally induced hypersecretion.

The research group consisted of twenty-one patients who were suffering from peptic ulcer. Since this is a small group, the statistical evaluation of the observations was carefully considered. A review of the literature showed that each ulcer study was restricted to groups of available ulcer cases, and hence could not assure the representativeness of the sample. Consequently conclusions concerning the total ulcer population are extremely precarious. Comparisons can be made between the results of different studies, and where the

various results and theory agree some confidence in both the theory and observations is justified. Where the observations are all in agreement, but the observations do not agree with the theory, there is perhaps more ground for doubting the theory than the observation. Where the observations do not agree, there is little ground for knowing which fails, namely theory or observations, or both. Our data were statistically analyzed first for internal comparisons of the twenty-one patients within this project. Second, there was a comparison of the whole sample with general population characteristics; third, comparison of the results of this and other studies; and fourth, comparison of the results on examination of sample records of four thousand patients of Ypsilanti State Hospital, Michigan, with general population characteristics and the results of similar studies.

To summarize both our general impressions as a group and the results of our statistical analysis it was noted that the patients were of average or superior intelligence. In the group was a pair of symmetrical twins, each of whom simultaneously developed a peptic ulcer in addition to a severe topical eczema which alternated in severity with the ulcer. With one exception, all were verbal, articulate, and expressed an eagerness to cooperate in the research. Five patients were referred by others already in the project, and three-fourths expressed the wish to refer other friends. They showed a great need for approval, were obsequious, and frequently asked for reassurance as to whether or not they were "doing all right." It was observed that there was intense rivalry, and they exhibited a low threshold for thwarting. There was a universal fear of rejection, and all had a strongly-motivated humanitarian impulse to look out for the "underdog." In general, they were all "do-gooders." It was striking to note the clarity with which they expressed the belief that emotional conflicts were the basis for their symptoms, and several insisted on psychiatric treatment even against the expressed opinions of their personal physicians. All of them realized that regardless of diet, faithfulness in taking medication and complete co-operation with their personal physicians, symptoms frequently recurred. They also observed that when they were apathetic or depressed the ulcer improved, and that exacerbations did not directly relate to spurts of ambition or overactivity. Family loyalties in general were intense, and four patients admitted not marrying or marrying very late in order to care for an aged mother. The feeling of never having been successful or completely adequate was uniform in all patients. Two developed speech inhibition in recent years which interfered with their work as public speakers. Intercurrent emotional difficulties were frequent, and several admitted that they felt worse when they had to go home.

According to 1947 census figures, 82 per cent of all the households in the United States containing a person once married, also contains the spouse. That is to say, 18 per cent of the once-married households in the United States had only the husband or the wife present, but not both. Of the households from which our patients came 57 per cent had only one parent. This difference is significant, and indicates that ulcer patients tend more than the normal person to come from broken homes. It has been observed by a number of different research studies that the ulcer patient has a better than average education. The median number of years of school completed by our patients was twelve. According to the 1940 census, the national median of number of years of school completed by persons who have completed their education is 8.4 years. The difference between these medians is significant, and bears out the observation previously mentioned as to the higher educational attainment of ulcer patients.

The average onset age of ulcers in the eight patients who did not come from broken homes is 21.1 years. The average onset age of the thirteen patients who come from broken homes is 30.2 years. This difference is statistically significant, as it appears that those who are deprived of a normal parental relationship can build up greater resistance to the onset of ulcers. It was apparent that almost every one in the group found it necessary to assume responsibilities at an early age, resulting from a broken home, with a premature assumption of financial and emotional responsibilities for siblings at an early date. Since the methods of defense used by the child-ego should be on a level with its chronological age, his ego may have been inappropriate for dealing with these early problems which demanded adult responsibility. The ego structure remained weak in spite of aggressive and overly-determined competitive attitudes. Many admitted they "felt brittle" and were unable to withstand pressure, both internal and external, but had to put on a "bold front."

In six of the thirteen broken homes from which

patients in this study came there was a parental substitute. The average onset age of ulcers among those who came from broken homes and had a parental substitute was 31.4 years. The average onset age of those coming from broken homes without a parental substitute was 28.5 years. There is not a significant statistical difference between these two ages. Hence the study does not indicate that the onset of ulcers depends on whether or not the patient coming from a broken home had a parental substitute.

Of the thirteen ulcer patients who came from broken homes, five suffered their first distress before the break-up of their homes, and seven after the break-up. This is not a statistically significant difference, and hence does not indicate that the age of the first gastric distress depends on the breaking of the home.

In the thirteen patients who came from families containing at least one alcoholic, the average onset age was 26.2 years. In the eight patients who had no alcoholism in their families, the average onset age was 27.4 years, with the difference not being significant. Hence, the onset age of ulcer seemed to be independent of the presence of alcoholism. Our data did not indicate that the age of onset is dependent on the presence of alcoholism in the family. However, a significant relationship between ulcers and alcoholism can be pointed out. In 1946, the Research Council on Problems of Alcohol reported that there were some 750,000 alcoholics in the United States. In that year there were 34,948,666 households in the United States (according to the U. S. census reports). This means that if there were only one alcoholic per household, two out of every one-hundred households (or 2 per cent) in the United States would contain an alcoholic. Since there is frequently more than one alcoholic per household, the actual percentage of households containing alcoholics is less than 2 per cent. In this study, thirteen of the twenty-one patients, namely 62 per cent, came from households containing alcoholics. This percentage is significantly higher than the 2 per cent one would expect on the basis of available statistics, and this indicates that ulcer patients tend to come from households containing alcoholics.

There was not a significant correlation between the age of the first job and the onset age. Although there are no figures available to prove the point, these ulcer patients seem to have taken their first job at an earlier age, in general, than the average person. The average age at which they took their first job was 13.9 years.

Nine of the patients suffered their first distress before they went to work on their first job, and nine did not suffer distress until after they went to work on their first job. In three cases, the events were simultaneous. This seems to indicate that the age of the first distress was independent of the age at which the patient had to go to work.

In a study by Reusch, he maintained that youngest children in the family had a higher incidence of ulcer. However, our study showed that 36 per cent were the oldest children, and 19 per cent of the cases were the youngest. But these differences, both in Reusch's study and ours, were not statistically significant.

Figures for the incidence of ulcers over the total United States population are very poor. Estimates vary from a conservative 1.5 per cent to 10 per cent, noted by Palmer in Cecil's "Textbook of Medicine," published in 1948. According to 1947 census figures, the average household in the United States contained 3.63 persons. If we take the lowest incidence figure, namely 1.5 per cent, then the frequency of households which would contain two ulcer patients, if ulcer patients were distributed at random throughout the population, would be 2.63 times 1.5 or 3.95 per cent. The fact that 62 per cent of our patients came from households where one or more other persons had ulcers, indicates strongly that ulcer patients are inclined to come from households containing other ulcer patients. Even if we assume that 10 per cent of the total population have ulcers and perform similar computations, the difference between the expected frequency of 26.3 per cent and 62 per cent is significant at the .05 level. Dunbar, at Presbyterian Hospital in New York, noted that 89.2 per cent of her ulcer patients came from households where other ulcers were present, so that her figures accentuate even more than ours the conclusion reached above.

In our sample of ulcer patients, the average number of children per ulcer patient family is 4.5. This figure does not show any significant difference in number from families without ulcer patients. According to "Vital Statistics," Special Reports, Federal Security Agency, Public Health Service (Volume 35, number 17, October, 1950), there was a total of 8,708 deaths caused by ulcers in 1948 in the United States. Thus ulcers caused 0.6 per cent of the total deaths in the United States.

Various reports have been given which seem to indicate that the death rate due to ulcers among psychotics is less than that of the normal population. Our interest was aroused by finding two cases which developed evidences of psychosis after the ulcer symptoms subsided. Gregg reported that among 600,000 deaths reported in a community and 26,000 deaths reported in Massachusetts State Hospitals, gastric and duodenal ulcers were reported as the cause of death in the community with a relative frequency three times as great as in State hospitals. Rosenbliett and Manley reported in 1940 that there was only one out of 300 deaths reported from the Northampton, Massachusetts State Hospital patients due to ulcer, namely 0.3 per cent. Rathmell and Luber reported in 1943 that autopsies of 420 institutionalized psychotics revealed eight peptic ulcers, that is 1.9 per cent. By combining various statistics that are available as to the incidence of death in the United States and in mental institutions in the United States, the number of deaths in the general population due to peptic ulcer, and the peptic ulcer deaths in mental hospitals, we find the figure of 0.31 per cent of all deaths in mental institutions being due to ulcers, while the percentage of ulcer deaths in the general population is more than twice that figure, namely 0.65 per cent. In this connection, we examined the death certificates of 1,967 patients at the Ypsilanti State Hospital and found five deaths due to ulcer, that is to say .25 per cent. This percentage is significantly different from the national figure of .65 per cent. It seems clear, then, that deaths from ulcers are less apt to occur among inhabitants of mental institutions than among people at large. A summary of the most recent figures obtained from Miss Lauretta H. April, Chief of the Public Inquiries Branch, Division of Public Health Methods, Federal Security Agency, Washington, D. C., denotes that approximately 300,000 cases of peptic ulcer occurred during a year. Of these, 180,000 persons were unable to work or pursue usual activities for short periods of time (that is, a few days); 140,000 were unable to work or pursue usual activities for longer periods, and 70,000 had to be hospitalized. Even permitting a range of 25 per cent error in this estimate one way or another, the seriousness in the economic problem involved in peptic ulcer is obvious.

Many of these patients suffered from constipation and severe bowel difficulties. The incidence of hemorrhoidectomy was high, as were other surgical operations. The incidence of constipation and headaches was great, and the history of other ulcers in the family has been noted. Frequent intercurrent dermatological disorders were noted in the peptic ulcer group. The atopic eczema usually was of a very severe nature, and alternated in severity with the ulcer symptoms. Three male patients developed nausea and vomiting during the periods of their wives' pregnancies. The association of anxiety with peptic ulcer symptoms was universal, appearing during ambivalent feelings involved at the time of making drastic decisions or a radical change of occupation. One patient, who was deeply attached to his mother developed a severe hemorrhage during the study period when he could not make up his mind to marry the girl his mother thought was "not good enough" for him. The second patient developed a severe hemorrhage in the course of the research when his father refused to fulfill an obligation incurred years ago, and instead had turned funds over to the twin sibling. This patient admitted that his feeling of futility in the situation produced the hemorrhage. Orality was exhibited by five who showed mannerisms of mouthing fingers and nail-biting. In addition, there were two stutterers.

During the taking of motility tracings and the titration of gastric juice, material was taken from the anamnestic processes to act as emotional stimuli. It was found that the volume flow of gastric acidity and motility were increased in the free association concerning painful historical data. It was apparent that the material dealing with anxiety, and which increased the painful contractions of the stomach, was concerned largely with past internal rather than present external stress. It was impossible to differentiate the specific and varied categories of emotional responses, such as anxiety or hostility. However, specific experiences could be evaluated in terms of the degree of subjective pain responses incidental to the recalling of early memories and deprivations, loss of love, et cetera, in other words, in physiological units. Such recall often was accompanied by acute gastric distress and pain.

They exhibited unusual pride in material comforts, and admitted concern in possible unforeseen expenses and future contingencies. In general, they were concerned over financial obligations, and unexpected bills seemed to be disturbing. One

patient took a job for less pay for what he called idealistic reasons, and then forced himself and his family to become unnecessarily mercenary in other ways. Their economic status was satisfactory, and each exhibited a sustained work record.

As a rule, the patients were argumentative, feared ridicule, complained of waking up tired and that their work was never finished. All uniformly spoke of a feeling of loneliness. As a group, they were easily irritated, restless, ambitious, and worked hard for long hours in order to do exceptionally well. As a group, all had vivid childhood memories, although there were exceptions, with two complaining as to lack of memory of early childhood. Several had a capacity for dramatic visualization of early childhood experiences. Immaturity was indicated by their need for immediate gratification, and appointments could not be postponed. The phantasy material revealed moralistically-tinged attitudes. Several recalled early childhood dreams of fear of darkness, of having possessions that were not available when they awakened, the father-figure who was big, healthy, and showing great affection, of dangers, castrative women, fear of water, and frequent recurrent dreams of eating and fear of punishment.

The psychodynamic factors as revealed by dream material and phantasies indicated regressive material to a physiological level. Frustration arose primarily from threatened ambition, fear of rejection, and unfavorable sibling rivalry, resulting in compensatory demanding or orally dependent aggressive attitudes. The dream material was preoccupied with suckling and ingestion of food, especially milk. The phantasies consisted of a need for love, and were concerned with receiving love as an infant. In general, they exhibited insecurity which threatened the pursuit of new goals other than the ones set out or established by parents. Two in the group yielded to the demands of an over-protective mother, yet harbored an inner resentment which accompanied a compulsive need to deny his own satisfactions or inclinations. Not infrequently there was present the fear of failure to fulfill his own ambitions, and in planning ahead; often failure was anticipated. Changes were reacted to with tension and anxiety regardless of ultimate success, as each new situation was accompanied by the fear of disappointment. There were strong obsessive-compulsive factors in several of the patients, who exhibited excessive orderliness so as not to permit the possibility of making an error. Unimportant details were assiduously observed. Working under the pressure of a strict supervisor provided the spurt of tension bringing about higher effectiveness.

The patients were classified in terms of tendency toward depressive, obsessive, compulsive, and anxiety states, and the categories were determined by agreement of observers from material in the therapeutic situation. The depressive group was considered as being mild to severe with definite sadness as a habitual mood and a desire not to face the day, a reduction of self-esteem and dim outlook for the future. There was the expressed idea of having an ulcer as "a cross to bear," plus difficulty in concentration, wishing to cry or actual crying, a sense of injustice and difficulty to sustain obligations. In the second group under the depressive category the individual spoke of being depressed and "only a sense of humor being all that kept him going"—with a characteristic attitude of withdrawing from people, accompanied by suicidal ideation. Three of the patients fell in the category of a severe depression. Each of these suffered from a feeling of lowered self-esteem and fear of ridicule, while eleven entertained periodic suicidal ideation and had evidence of social withdrawal.

The relationship of peptic ulcer to a group of affective disorders, notably manic-depressive psychosis, has been well established. In the obsessive-compulsive group there was excessive orderliness, preoccupation with details, competitive thinking, episodic meticulousness, et cetera. Two exhibited severe repetitive compulsions which could be expressed without severe anxiety, while the remainder exhibited varying degrees of anxiety accompanying repetitive thinking and acting. Two patients lived in a constant chronic anxiety state, while seven suffered from anxiety symptoms of longer duration, each with definite free periods between episodes. The remainder were "anxious" in relation to recurrent ordinary hazards. Six male patients showed latent homosexual conflicts, and one female patient had been an overt homosexual for many years.

Our material suggests that the psychosomatic symptom of peptic ulcer may be a vegetative regression which prevents psychological regression. In two cases it was apparent that the removal of symptoms enhanced and actually developed such psychotic symptoms. By obtaining "tender loving

care" by his family or regression through nursing care and passive dependency, by receiving an infantalizing diet of milk and cream with frequent feedings, the individual could regress and still "save face." However, if he had no physical symptoms he could be forced to the competitive job situation and his need to assume responsibility for his family. If his immature and under-developed ego could not withstand the responsibility and it was impossible to regress without having physical symptoms, psychological regression or the development of more disabling symptoms or psychosis might then result. This is in keeping with the observations made on the use of ACTH in certain patients, who after the relief from physical symptoms develop psychotic manifestations.

Certain psychosomatic symptoms seem to represent earlier forms of reaction than do the later psychological difficulties. It is possible to distinguish two types of vegetative regression. Spite showed a severe nutritional change in young infants deprived of maternal care in and out of institutions. These infants developed eczema within the first year of life, as well as retardation in neuromuscular development, susceptibility to infection, and mental retardation. In this early period of infancy the traumatic events can be of such a magnitude that they have to do with the actual survival of the infant. Those which develop after the dawn of language are less regressive, fixed, and are more amenable to psychological therapy. Symptoms, therefore, could be indicative of partial regression, with the total personality dependent on the proportion of all other trends, both regressive and progressive. In evaluating the different impulses and their ramifications, the physiological factors seem more significant than the psychological forces in evaluating the infancy and early childhood experiences.

Since frequent intercurrent dermatological disorders, notably atopic eczema, occurred frequently in the early childhood and persisted into adult life in our peptic ulcer group, it is suggested that there is a relationship between these organ systems. The embryonic origins of the nervous system, skin and its integument, the special organs of sensation, and certain of the secretory epithelium are ectodermal in origin, these structures representing the protective physical barrier and physiological contact between soma and outside world. On the basis of the "pleasure principle," any stimuli from the environment will be repeated as negatively or positively conditioned physiological responses in which an adaptation must be made. A histamine-like production can be observed in functional dermatological disorders which have been reported in early childhood and in infancy, where the child's survival is questionable. A histamine-like product also can be elaborated in the mucosa of the stomach, and its formation is dependent on the circulatory changes in the small arterioles and capillaries, especially along the lesser curvature of the stomach. These small terminal blood vessels are affected by emotion, as are other vessels elsewhere in the body. The pharmacological responses observed under emotional stress and in bringing back painful memories from early childhood, result in the increased volume flow of gastric juice with increased acidity and painful contractions. This physiological response may represent an earlier form of libidinal regression concerned with visceral functioning at maintaining homeostasis in order for the infant to survive. This physiological regression is preverbal and antedates psychological regression. According to Freud, in his "New Introductory Lectures in Psychoanalysis," our attitude to the phase of libidinal development has altered somewhat in general, indicating how much of the earlier libidinal phase persists side by side with and behind later organizations and can become a permanent representation of the personality. Thus regression can become partial and specific without regression of the entire personality. In accordance with these observations then, our material indicates that a psychosomatic symptom can be an evidence of partial vegetative regression preventing psychological regression. Thus Freud assumed that the primitive undifferentiated phase of development, in which no differentiated object is yet existent, has two qualities in which internal tension becomes conscious, namely pain and pleasure, the former being related to mounting tension and the latter to discharge. In the peptic ulcer group, the primitive ideation seems still regulated by the pleasure-pain signals arising from the tension inside the psychic apparatus. When the organism achieves new conscious qualities, a relative liberation from the exclusive rule of these pleasure-pain signals takes place. These new conscious qualities ultimately then make up what we refer to as "thoughts." Thus the instinctive reaction has two aspects, a qualitative and a quantitative one, with the quantitative one ex-

pressing affect charge into the inner zone of the somatic apparatus, resulting in somatic changes of affective origin; the qualitative one is the idea, the cathectic memory trace.

In summarizing, a general formulation of the psychodynamic factors basic in the series of patients might be considered as follows: The Oedipal situation is unresolved and poorly managed, with evidences of severe distortion of early mother-child relationship resulting in the development of strong passive feminine identification and retreat from the genital to the oral sadistic (anal) level of libidinal organization with a discharge of aggressive and sexual impulses. The expression of this libidinal need is fixed at the infantile level of dependent love and attention. The relationship of dependency and hostility becomes manifested early, and the material shows that the traumatic events during the infancy of these patients are related to survival and are different from the traumatic events occurring later in the more developed personality. The physiological gratifications provide for a protective relationship and provide the "missing link" to fulfill the primary needs denied earlier. The oral dependency and orality are vividly shown in dreams and phantasies, with marked hostility exhibited to the mother-figure as a result of the resentment arising out of the passive dependent attitudes. Love relationships, therefore, take on the coloration of mother-figures, with longings and strivings for dependency in marriage upon a mother-person. Unresolved hostility for the father which is poorly expressed, the father often resembling a symbol of authority with whom the patient vainly struggles in competition. This hostility prevents further establishment of satisfactory relationships toward authoritarian figures. The dependency on mother, wife and therapist show intensity and depth, and in many patients mastery of such individuals in the environment is accompanied by intense jealousy and demanding attitudes. Anxiety reactions in male patients as to their passive homosexual attitudes: in a cultural group where passivity in males is frowned upon, it is more difficult for a male to regress, and this may explain the higher incidence of peptic ulcer among males. Uniform intense sibling rivalry: many of the exacerbations of painful physical symptoms can be associated with specific episodes in his life experience arising out of guilt feelings from sexual "transgressions," hostility, and inability to face ego-alien strivings. Protection from the anxiety is accomplished through the development of conversion or organ neurosis.

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The total Federal revenue collections for March, 1953, were the largest of any single month in the nation's history and were greater than the total for *any single* year prior to 1942. The March total was $11,870,234,374, greater than all Federal revenues collected in the twenty-one years from 1890 to 1910, combined. The single month's revenues topped the twenty-one-year total by more than $219 million.

It is interesting to recall that 1939 is the last year in which the net spending of state and local governments exceeded that of the Federal government.—Paul Shafer.

Cortisone and Pregnancy

By Edwin J. De Costa, M.D.

Chicago, Illinois

RECENT YEARS have witnessed a veritable parade of the so-called "wonder drugs." One might begin the era with the advent of prontosil in 1935, run the gamut of sulfa drugs, then the antibiotics, and wind up with the adrenocorticotropic and adrenal cortical hormones. Even this is incomplete. Vitamins must be included and their number is still being augmented. An entire new group of "wonder drugs" is developing in the so-called antimetabolite field, of which the sulfa drugs and perhaps the various antibiotics are a part, and still another in the investigation of cholinergic and adrenergic and related agents. We are truly witnessing a revolution in the biological sciences.

The wonder drug which most excites the imagination is cortisone. Yet after three years, how much do we know about it? We can describe its physiological effects and we do know a bit about its action, particularly its antirheumatic properties. Interestingly, however, cortisone seldom finds application in conditions associated with actual cortical insufficiency. When used therapeutically, it is usually in patients with normal adrenal function and the dose employed is generally many times that needed to maintain patients with adrenal insufficiency.

Further, cortisone apparently does not cure anything. It is capable of producing remissions in a variety of diseases by altering the usual host response. If it is not curative, how can we explain all the enthusiasm? Insulin does not cure diabetes, nor does thyroid extract cure myxedema. Still both drugs are exceedingly valuable. A remission indefinitely prolonged can be almost as valuable as a permanent cure if no ill effects accompany administration. Remission can also be exceedingly valuable in diseases or conditions of short duration. In addition to the therapeutic value of cortisone, observation of its effects has greatly advanced our understanding of physiology and pathology of the entire body.

ADRENAL CORTICAL HORMONES

Influence on water and mineral metab.	Sex hormones 2nd sex char.	Influence on CHO & P metabolism Response to stress. Alteration of antigen-antibody response.
Desoxycorticosterone	Androgens	Cortisone (E)
	Estrogens	Hydrocortisone (F)

Fig. 1. Major physiological properties of adrenal cortical hormones.

Cortisone is one of a series of steroid hormones isolated from extracts of the adrenal gland. These hormones, although chemically similar, exhibit wide differences in physiological properties (Fig. 1). Some, like desoxycorticosterone, have a profound influence on water and electrolyte balance. Others are essentially sex hormones and are partially responsible for the development of secondary sex characteristics, while a third group is intimately associated with carbohydrate and protein metabolism and the host response to stress. Cortisone belongs to the last group. It must be emphasized however that most steroids have multiple actions even though these differ quantitatively. Thus, DCA has a profound effect on electrolyte balance and a weak metabolic effect, while cortisone has a profound metabolic effect with less influence on electrolyte balance. Even the sex hormones, of which progesterone is possibly one, influence salt balance and protein metabolism.

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To appreciate the action of the adrenal cortical hormones it is necessary to study the adrenalectomized animal. Under ordinary circumstances the latter dies in four to seven days. However, if

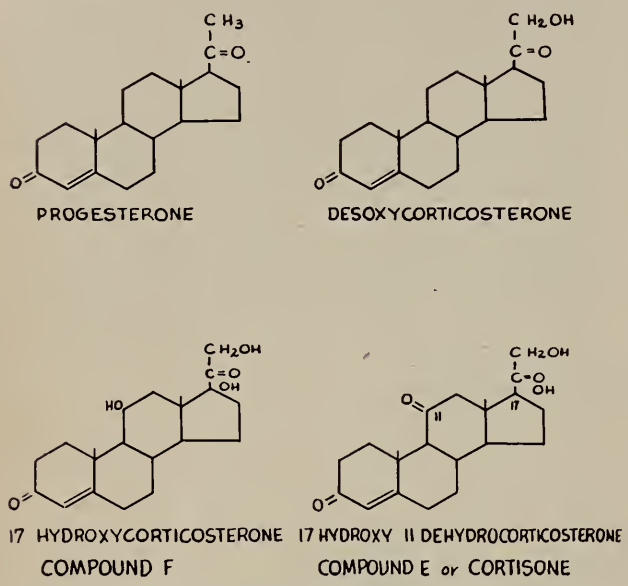


Fig. 2. Chemical similarities of progesterone and adrenal cortical hormones.

the adrenalectomized animal is given DCA or an adequate amount of salt, it will grow, even reproduce, and lead a fairly normal existence providing it is not subjected to stress.

Adrenalectomy seems to damage the renal epithelium so that its ability to resorb sodium chloride is decreased. Fluids are lost, the blood pressure falls, and before long the loss of NaCl is sufficiently great to be incompatible with life. If sufficient NaCl is administered either orally or intravenously to replace that lost through the kidneys, the normal electrolytic balance may be reestablished even without hormones. However, correction of the electrolyte balance, either by using salt or salt-influencing hormones, still does not restore the normal response to stress. The animal easily fatigues and will die when subjected to conditions which ordinarily would have little deleterious effect. The ability to react to stress appears to be associated with the maintenance of peripheral circulation, a property which the C 11 oxysteroids alone control. And cortisone is one of these.

In spite of the demonstrable body need for mineral-regulating and stress-protecting hormones, we still do not know which steroid or steroids are the primary hormones. There is considerable evidence however that neither DCA nor cortisone is such. The histologic division of the adrenal cortex into three distinct zones suggests however that more than one hormone is produced.

Normally the activity of the adrenal cortex is controlled by the adrenocorticotropic hormone (ACTH) of the anterior pituitary. In the intact animal, the effects of ACTH therefore are quite similar to those following the administration of cortisone. The relationship between the adrenal cortex and the adrenocorticotropic hormone is similar to that existing between the gonads and the gonadotropic hormone in that a reciprocal mechanism controls the hormonal output.

There is an interesting relationship between the adrenals and the gonads. Chemically some adrenal and ovarian hormones are quite similar. DCA and progesterone differ solely by a hydroxyl group at C 21. (Fig. 2) Embryologically the adrenal glands and gonads arise from adjacent anlagen. Histologically, luteinized ovarian cells bear a close resemblance to the cells of the adrenal cortex. Thus one might expect adrenal and ovarian function to be interrelated. Since pregnancy is intimately associated with ovarian activity, one might even expect adrenal function and pregnancy to be closely related, and this seems to be the case. Pregnant animals survive much longer after adrenalectomy than non-pregnant animals. Normally in both animals and humans the adrenals hypertrophy and are hyperactive during pregnancy.

Pregnancy is a period of increased endocrine activity. We assume that a balance normally exists between the various hormones and that this balance is essential for the successful outcome of the pregnancy. For example, a certain level of progestin, whether that be elaborated from the corpus luteum or placenta, is necessary for the normal continuation of pregnancy. It seems logical that imbalance might be associated with abnormalities of gestation. Such imbalance could occur spontaneously or it could be precipitated by the administration of potent drugs.

Since cortisone is a powerful adrenal cortical hormone, the thoughtful physician at once questions the effect it might have on reproductive functions and on gestation. An exhaustive survey of the literature fails to reveal a satisfactory answer to these questions. Therefore a series of experiments was undertaken in an effort to learn something about the effects of cortisone on reproduction and gestation.

I shall not burden you with the details of these experiments.[4] Briefly, rabbits were used as experimental animals. Cortisone was administered intramuscularly in a daily dose comparable to the maximum dose used in humans, if weight is taken as the criterion. We learned that cortisone did not influence the rabbits' ovulatory mechanism but it did decrease fertility, although conception occasionally occurred in animals receiving cortisone.

The effects of cortisone administered at various periods of gestation were next studied. It became obvious that cortisone could definitely damage the fetus. The extent of the injury varied with the time of onset and the duration of medication. The later in pregnancy the drug was initiated, the more rapid was the effect. Damage was manifested either by intrauterine death or premature labor. Intrauterine death was observed to occur in some animals many days after cortisone was discontinued. This deleterious effect on reproduction has been substantiated by recent reports from other investigators.[3,6]

The literature reveals that cortisone has been administered to women during pregnancy. At times this has been accidental, the patient having been treated with cortisone when conception occurred. At other times, cortisone has been purposely prescribed during pregnancy for indications which may, for convenience, be group as follows: (Fig. 3.)

USE OF CORTISONE DURING PREGNANCY

1. Accidental - conception occurring while under Cortisone therapy.
2. Purposeful - in the treatment of :
   - A. Conditions existing prior to pregnancy and unrelated thereto.
   - B. Conditions arising during pregnancy but unrelated thereto.

   Indications for the use of Cortisone in the above categories include :

   Rheumatoid arthritis
   Acute rheumatic fever
   Acute disseminated lupus erythematosis
   Addison's disease
   Skin diseases
   Inflammatory eye diseases
   Various allergic phenomena

3. Experimental - in order to observe the effects on:
   - A. Normal gestation
   - B. Abnormalities of gestation
     - a. Toxemia
     - b. Hyperemesis gravidarum
     - c. Erythroblastosis fetalis

Fig. 3. Indications for the use of Cortisone during pregnancy.

(1) In the treatment of conditions which existed prior to pregnancy and unrelated thereto; (2) in the treatment of conditions arising during pregnancy and still unrelated thereto; and (3) experimentally in order to observe the effects of cortisone in normal and abnormal pregnancy.

The conditions referred to in the first two categories include the diseases for which cortisone is commonly believed to be beneficial: rheumatoid arthritis, acute rheumatic fever, acute disseminated lupus erythematosis, Addison's disease, skin diseases, inflammatory eye diseases and various allergic phenomena.

Cortisone has been used experimentally during pregnancy to study its effects on the normal parturient, and on patients with unusual conditions which theoretically might be benefited. There are three such conditions in which cortisone has been administered: in toxemia, hyperemesis and erythroblastosis fetalis. The theory behind the use in toxemia is intriguing, even if difficult to understand. As already mentioned,

adrenalectomy and adrenal insufficiency are associated with salt loss, dehydration and low blood pressure. The administration of adrenal hormones will quickly re-establish the normal electrolyte balance. Furthermore, when cortisone is given to the intact animal or where there is excessive cortical activity, the blood pressure is elevated and salt and water are retained. Since this picture resembles certain aspects of toxemia of pregnancy, it has been conjectured that excessive cortical activity is responsible for toxemia. Even if such is the case —and objectively there is a fair parallelism—it is difficult to understand why giving more of a substance already in excess should prove beneficial. Of course, one can always fall back on the old reciprocal relationship between the adrenals and the pituitary. Giving cortisone suppresses ACTH which in turn reduces the level of endogenous corticoids. Or one can introduce a hypothetical upset of balance between various adrenal steroids which the administration of cortisone corrects. The only drawback to these theories is that they are still theories.

At any rate, with or without rational excuse, cortisone has been given to toxemic women. And what have been the results? To date, about a dozen patients have been so treated and, as with normal pregnancy, there is no evidence that the fetus has been damaged. Since toxemia is a disease of late pregnancy, this is particularly interesting. It will be recalled that in the rabbit damage was most readily produced late in pregnancy. And what about the effect on the toxemia? One conclusion seems evident: in the dose employed, the patients did not become worse. One author[12] believes that there was clinical improvement, although the blood pressure remained unaffected. However, since his patients also received the usual routine general care for toxemia, it is difficult to evaluate the success. Another author was unable to observe any effect.[10]

Cortisone has been administered early in pregnancy to patients with hyperemesis gravidarum with some improvement.[14] As yet this has not been reported in the literature. The rationale here is equally strange because it is based on the premise of cortical deficiency rather than excess. It is presupposed that the adrenals are unable to meet the demand of early pregnancy and the patient develops a picture of hypocorticism: nausea, vomiting, weakness and low blood pressure, similar to that observed in Addison's disease. This theory is not new; crude adrenal extracts, now known to have possessed only a minimal steroid content, were used years ago and with apparent success. However, since suggestive therapy can play so important a role in the management of hyperemesis, it is difficult to evaluate the effectiveness of cortisone. But again certain observations emerge: (1) if effective, cortisone is certainly not specific; and (2) there is no evidence of fetal damage following the administration of cortisone early in pregnancy.

One of the effects of cortisone not yet mentioned is its ability to alter antigen-antibody reactions. This is the basis for its use in the treatment of allergic phenomena such as asthma, hay fever and hives. Since erythroblastosis fetalis results from an antigen-antibody reaction there is logic in the assumption that adrenal cortical hormones might modify this reaction. Again the literature reveals about twenty instances in which cortisone or ACTH has been employed in an effort to salvage the fetus of the Rh(-) sensitized mother. Unfortunately, in most of the reported cases, neither the titer nor the fetal salvage rate has been influenced.[5,8] However, recent reports are more encouraging.[1,2,9].

We can summarize the effects of cortisone in this third category—that in which it has been used experimentally in normal and abnormal pregnancy —by stating that there is, as of the present, little evidence that cortisone is of any benefit in the conditions for which it was used, nor has there been any evidence that cortisone has produced any harm to either fetus or mother.

Confirmation of these observations, that cortisone does not affect either the mother or the fetus adversely, has been made by Margulis and Hodgkinson.[11]

Even if there is no reported evidence of damage, cortisone is not considered an innocuous drug. There are certain side effects which usually become manifest with prolonged administration if the dose exceeds 75 mg. per day (Fig. 4). These include psychic disturbances, fluid retention with edema, hypertension, occasionally glycosuria, acne, weakness, and alterations in healing. Because of these reactions, there are definite contraindications to the use of cortisone, whether the patient is pregnant or not. These include mental disturbances, congestive heart failure, chronic nephritis, hypertension, Cushing's syndrome, diabetes mellitus, peptic ulcer and tuberculosis.

I have observed the effects of cortisone during

pregnancy on five patients. In two patients, conception occurred during treatment, one for rheumatoid arthritis, the other for recurrent acute rheumatic fever with mitral stenosis. The patient with rheumatoid arthritis spontaneously aborted at fourteen weeks; the pregnancy in the patient with acute rheumatic fever was therapeutically terminated at the eighth week. In both instances the fetus and placenta appeared normal. From these patients we learn that, as in the case of the rabbit, cortisone does not necessarily upset the ovulatory mechanism and fertilization and implantation can and do occur.

UNDESIRABLE EFFECTS	therefore	CONTRA-INDICATIONS
Psychic disturbances		Mental diseases
Fluid retention & edema		Congestive heart failure Chronic nephritis Cushing's syndrome
Hypertension		Hypertensive disease
Hyperglycemia & Glucosuria		Diabetes
Alteration of healing		Peptic ulcer Tuberculosis
Acne		

Fig. 4. Undesirable effects and contraindications.

The remaining three patients were treated for conditions not primarily related to the pregnancy. One patient was treated for disseminated lupus erythematosis antedating gestation, one patient for an erroneous diagnosis of rheumatoid arthritis developing during pregnancy, and one patient for allergic phenomena. In each instance, a living baby was delivered at term. The history of the patient with the allergy is unusual and deserves special mention. She was a thirty-one-year-old primipara who, following a violent sneezing attack due to an allergic rhinitis, ruptured the membranes in her twenty-second week of gestation. Labor did not ensue and it was thought advisable to try to carry the fetus to viability. Cortisone was given to control the distressing sneezing and the patient was kept in bed except for bathroom privileges. During the next thirty-nine days there was no sneezing and she felt remarkably well. At that time she began to bleed vaginally and treatment was discontinued. Within thirty-six hours she went into labor and delivered a 1090-gram male infant which survived.

Several interesting observations are possible: (1) Since the chances of survival of a twenty-seven week gestation are poor at best, there is no indication that cortisone affected the fetus adversely; (2) since intrapartum infection did not occur in the face of ruptured membranes, there is no evidence that the normal defense mechanism against bacterial invasion was affected; and (3) since the child's vision is normal, retrolental fibroplasia, so common in tiny prematures, did not occur. Obviously, one swallow does not make a spring, but it is pleasant to believe that the suppression of fibroplasia—another property of cortisone—may have been a factor in the apparent normalcy of this baby.

Little has been said about ACTH: it too has been used during pregnancy, some of the indications being identical with those for cortisone. The number of scattered cases to be culled from the literature is about the same as for cortisone, approximately twenty. Here too there is no evidence of either maternal or fetal damage.

One may conclude therefore that although cortisone interferes with pregnancy in the rabbit, there is no evidence of this effect in the human. These observations serve to remind us that data obtained from the experimental animal cannot always be applied to the human.

On the other hand, we have also seen that the indications for the use of cortisone during pregnancy are few and far between—and at present, in the dose employed, cortisone does not seem to have any value in the treatment of conditions specifically allied to pregnancy.

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The Epilepsies

Their Diagnosis and Treatment

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THE TERM "epilepsy," cannot be satisfactorily defined. The word is of ancient usage, and actually means "fits," or seizures. As at present employed, it includes all convulsive disorders, of whatever etiology and of whatever clinical type, both with and without actual motor phenomena. There is a rather widespread tendency to restrict the term epilepsy to those convulsive disorders for which no evident cause can be found and which therefore may be considered "idiopathic." If there is indeed a specific constitutional, and perhaps inherited, "disease" to which the term epilepsy might be restricted, and if such a "disease" could be diagnosed with any surety, this usage might be justified. As at present, however, the matter is too uncertain, and the so-called "idiopathic" or cryptogenic class of convulsive disorders is constantly being diminished as more and more cases are moved over into a "symptomatic" convulsive category, so that no definition of such a "true" eplipesy can be made. If therefore the word, epilepsy, is to be used at all, it ought, in the current state of our knowledge, to be made synonymous with "convulsive disorder," and with no implied etiologic connotation. With this basic convention, we may for convenience subdivide the epilepsies into those cases which are of known, and those that are of unknown, origin. This plan we shall follow here.

Clinical Types of Seizures

Epileptic seizures are of several *clinical* types. The terms used to denominate these types are, for the most part, of ancient origin and are purely descriptive, although modern studies have led to the introduction of many terms with etiologic or even anatomic connotations. Thus the nomenclature of the epileptic states has become most confusing. We shall pick our way with care through these terms.

Grand Mal.—The Greeks from the time of Hippocrates recognized the "great disease" and the "little disease"; later came the Latin terms "morbus major" and "morbus minor," and in the XIX Century the French equivalents, *grand mal* and *petit mal,* now in common usage. The major convulsive seizure, or grand mal, may begin with a subjective warning or "aura," consisting of an indescribable epigastric sensation which rapidly ascends to the head, or of almost any other sensory state, visual, auditory, olfactory, somatic or whatnot. The modality or location of this aura may have value in localizing the onset of the cerebral discharge. An "epileptic cry" may follow, with immediate, generalized motor convulsive movements which throw the whole body into tonic rigidity in an opisthotonic or other grotesque posture, sometimes with the ascendancy of certain patterns leading to conjugate deviation of the eyes and head, or extension of some limbs and flexion of others. If standing, the patient falls like a log and may injure himself. After several seconds the tonic contractions thin out into clonic, repetitive jerks of explosive vigor, involving the whole body. During the motor phenomena, respiration is abolished, the face becomes suffused with blood or waxy pale and salivation is often increased. The tongue may be protruded and bitten. The actual convulsion lasts one to two minutes, sometimes longer, and ends when the clonic jerks died out, often with one last severe jerk of the whole body. Involuntary urination or defecation may follow the convulsion, as respirations are resumed in stertorous form, frequently blowing saliva, perhaps blood-stained from the bitten tougue, between the blue lips. Coma persists for several minutes, perhaps for hours, and ends as the patient passes through stupor and confusion to puzzled consciousness, often to find his head violently aching and a great lethargy dragging him to sleep. He may be violent or show other inappropriate behavior during his period of confusion, and such bizarre actions may continue for an hour or more.

Many variations of this complete seizure may be seen, but usually any given patient exhibits the same sequence of events in every grand mal seizure, although he may also suffer from other types of attack on other occasions. Sometimes one grand mal seizure may pass directly, or after a brief period of coma, into another, thus establishing the so-called status epilepticus which may continue for hours.

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Petit Mal.—Minor seizures occur chiefly in children, but may appear in adults, alone or interspersed between grand mal attacks. In the young they may occur with amazing frequency running into scores or even hundreds a day, and effectively blotting out all mental life. When very brief and frequent these sometimes constitute what is called *pyknolepsy*—a term for which there is little justification. Grand mal seizures may occasionally intervene in the patient with petit mal, and often the same aura which may introduce the more severe attack may also herald the milder one. As the child with petit mal grows older he may have fewer and fewer attacks until they disappear forever, or he may gradually exhibit more and more of the major seizures as the minor ones diminish in frequency.

The petit mal attack is simply an abruptly onsetting, brief period of altered or severely obtunded consciousness, in which the sufferer stares blankly, perhaps blinks a few times, or exhibits a few small facial twitches or lip movements, while dropping an object held or ceasing to perform an act in progress at the onset. He does not heed commands, or later remember them. He may continue to walk if an attack occurs while he is so engaged. In most cases the duration of such seizures is only a few seconds or a minute.

So-called *akinetic* epileptic seizures resemble petit mal in that few or no motor phenomena are noted, but they differ in that they abolish consciousness for so long that the patient falls to the ground for several minutes to an hour or longer. The term "akinetic epilepsy" has, with doubtful propriety been applied also to the post-ictal exhaustion noted in an extremity after a focal motor seizure in that part.

Psychomotor Seizures (epileptic equivalents) constitute a very large and clinically heterogenous group of complicated and often bizarre attacks. They have been known, at least in part, since the days of Hughlings Jackson, but recent years have added greatly to our knowledge of them. Though widely varied in their clinical characters, many arise from discharging foci in the anterior portion of one or both temporal lobes, and have certain electroencephalographic features in common. Some of them were once thought hysterical, and may still easily be confused with hysterical fits. The term "epileptic equivalent" is inappropriate, since they are true epileptic phenomena, not merely equivalent to epilepsy. At least three subvarieties may be distinguished.

Ictal Automatisms (co-ordinate epilepsy).—In these attacks the patient abruptly breaks off the stream of his behavior to perform inappropriate motor acts of varying complexity and bizarreness, with subsequent amnesia for the entire episode. These motor phenomena are quite synergic and appear purposeful, ranging from random, dreamlike acts such as unbuttoning the clothes, walking aimlessly about or moving furniture, to unprovoked violence in which other persons may be attacked or articles broken or thrown about. Such behavior usually persists for a few minutes; it has been said to last for hours or days—a statement it would be well to doubt. An ictal automatism ends as abruptly as it began, leaving the patient usually aware that "something has happened" and vaguely ashamed, though amnesic for all details.

Ictal Amnesic States.—These states constitute the second form of psychomotor seizure, and are less common than the automatisms just described. In these, the patient simply continues his previous behavior (e.g., driving a car, operating a comptometer) without break and with full accuracy and appropriateness. Later, he has complete amnesia for the period—usually a few minutes—in question. A patient of mine, a clerk, while making out pay-checks for the office force, suddenly realized she had made out several "without knowing it," and yet quite correctly. In such cases bystanders may notice nothing amiss.

Ictal Dreamy States.—A third type of psychomotor seizures consists simply of brief periods of impaired but not lost consciousness, with a "dreamy" quality of unreality, a sense of unwonted familiarity *(deja vu),* or an illusion that observed objects are of gigantic or miniscule size, or are rapidly approaching or receding from the patient. Sounds may seem very loud and near, or far, far away. The two essential qualities of all such attacks are (1) the bizarre distortion of the sensorium and (2) the queer, unreal, or inappropriate, often eerie, emotional experiences associated with it. These attacks, like other psychomotor seizures, are of only a few seconds' duration, and end as abruptly as they begin. Such dreamy states may accompany olfactory or gustatory hallucinations of momentary duration (so-called *uncinate* seizures,

because of their origin in the uncus of the temporal lobe), and they may serve only as the herald or "aura" for major convulsive seizures (grand mal). They were originally called "intellectual aurae" or "highest level fits" by Hughling Jackson.

Myclonic Epilepsy.—In a few rare cases of persons suffering from major convulsive seizures, irregular powerful clonic muscular twitches may be observed between attacks. Frequently, these are bilaterally symmetrical, involving, for example, the pectoral muscles on each side, or the biceps and triceps muscles. These twitches may produce movement of the extremities, and may even interfere with the patient's gait or throw the patient to the ground. According to Wilson, they may be accompanied by the briefest of interruptions of consciousness, and may be the patient's only clinical evidence of epilepsy. In a special group of such patients, familial incidence is recognized. These have been called the familial myoclonic epilepsy of Unverricht, after their first describer.

Focal Eplipesy.—As we shall see below, the definition of "focal epilepsy" is no longer easy, since recent work has shown that certain cases formerly not considered focal (e.g., the psychomotor types described above) arise from localized disturbances in the brain. However, since the days of Hughlings Jackson, certain motor convulsive seizures have been recognized as focal, because the convulsive movements began in a single, small group of muscles as clonic twitches, and spread progressively within a few seconds to adjacent muscles, on to involve the whole side of the body, or even to end in a generalized convulsion. The point of origin of such a seizure always indicates that the irritative lesion is in the corresponding area of the contralateral motor cortex (pre-central gyrus). As a rule, consciousness remains intact in such cases unless and until the convulsive movements become generalized. Focal motor seizures of this type have been called *motor Jacksonian epilepsy.*

Exactly comparable focal sensory seizures are also well known. In these, a sensory paresthesia begins in a small area and spreads by a similar "march" to adjacent areas, until wide regions or the whole body surface is covered. Again, consciousness remains intact unless and until the paresthesia crosses the mid-line of the body. Such focal sensory seizures may be accompanied by, or lead immediately to focal motor seizures. Thus, the concept of *sensory Jacksonian epilepsy* is readily formed.

Special Sensory Focal Epilepsy.—A less obvious, but equally definite sensory focal epilepsy is characterized by an onset with hallucinations of the special senses, instead of somatic parestresias. Examples are seizures beginning with formed or unformed visual or auditory hallucinations, or hallucinations of the olfactory or gustatory modalities. Such aurae, especially the olfactory and gustatory ("uncinate") ones, are usually accompanied by complicated sensorial and emotional states, such as feelings of unreality or a strange, confused sense of familiarity which is inappropriate to the circumstances, or other, indescribable feelings. Unformed visual aurae (flashes of light or color) suggest a discharging lesion in the contralateral occipital lobe, while the formed aurae (e.g., trees, houses, "a little old lady dressed in brown") imply irritation in the contralateral temporal lobe. The olfactory and gustatory (uncinate) aurae arise from irritation of the uncus of the temporal lobe, but lateralization is not possible on purely clinical evidence. These special sensory aurae may constitute the entire seizure, or may at once lead to major convulsive seizures (grand mal), while the olfactory or gustatory hallucinations may also (and more frequently) introduce psychomotor seizures of the "dreamy state" type, or automatisms. Contrary to the hallucinations of the psychotic, both special and somatic "aurae" are recognized by the patient as "unreal" or hallucinatory.

Diencephalic Epilepsy.—This type, so-called, is a rare, only recently recognized, and perhaps doubtful type. It is featured by abrupt and inappropriate visceral autonomic crises, with paroxysmal sweating, tachycardia, dyspnea, trembling and perhaps gastrointestinal unrest. Some clouding of consciousness or sense of unreality may accompany such crises.

In our discussion of the clinical types of epilepsy, it remains only to mention the rather rare cases, in which specific forms of sensory (or emotional) stimulation may induce attacks. Many cases are on record in which bright light, and especially rapidly flashing light, precipitates a seizure ("photogenic epilepsy"). In other patients music, and usually of some particular mood, may

bring on seizures ("musicogenic epilepsy"). Any neurologist can cite instances in which emotional shock seemed to precipitate attacks. In all of these the stimulus is, of course, only a precipitant, and not the basic cause of the convulsive disorder.

Etiologic Types

Symptomatic Convulsive Disorders.—It is at once apparent to any clinician that many cases of convulsive disorder may be attributed to specific antecedent "causes," such as tumor of the brain, trauma, uremia, head injury, heart block, et cetera. But in a fundamental sense, the question of etiology remains unsolved, since it appears that such "causes" are effective only in certain "vulnerable" persons. For example, in some persons, the most severe injuries to the brain are never followed by convulsions, while in others even mild injuries may establish a convulsive disorder. No one knows why this is true; if electroencephalograms could be done *before* head injury, it *might* be discovered that only those persons with preexisting cerebral dysrhythmia ever develop posttraumatic convulsive states. However, such an assumption on existing evidence is at least very doubtful.

But aside from this basic reservation, one may profitably speak of symptomatic convulsions, and is obligated to look for etiologic agents in every case, in order to institute rational treatment. A list of causes can never be complete, but certain groups may be recognized. A suggested etiologic classification follows; under each heading, further examples can easily be inserted.

1. *Gross Cerebral Disease:* Tumor cerebri; trauma to brain; infections (meningitis, encephalitis, syphilis); degenerations (Pick's disease, Alzheimer's disease, Schilder's disease); gross hemorrhage, intracerebral, subdural, subarachnoid, of whatever cause; spastic palsies of childhood, of whatever etiology, et cetera.

2. *Metabolic Disturbances:* Uremia, eclampsias, various toxemias, diabetes, hyoglycemia, et cetera.

3. *Intoxications:* Alcohol, metals, such as lead or arsenic, drugs, gases, et cetera.

4. *Circulatory Disturbances:* Cerebro-vascular anomalies, cerebral angiitis, heart block, paroxysmal tachycardia of various types, carotid sinus reflex, certain allergic states, et cetera.

The modern clinical management of patients with convulsive disorders requires that such etiologic factors be carefully sought for in every case. It is for this reason that the study of epilepsy demands the broadest knowledge and experience of the whole field of medicine, and requires, above all, a mature and wise clinical judgment. No set scheme for the study of all cases can be prescribed, for unique features will always call for special thought and unusual approaches.

Cryptogenic Convulsive Disorders.—Despite the most intensive search, no "causative" factors will be found in the majority of cases. This majority of our patients may then be said to suffer from a cryptogenic, or "primary" convulsive disorder. With the advance of medical knowledge and the sharpening of our investigative techniques, more and more cases which were formerly "cryptogenic" become at last "symptomatic." In one sense the whole history of our knowledge of the epilepsies since the days of Hippocrates has been the story of the discovery of an ever greater variety of the "causes" of the convulsive disorders. Many examples might be cited, for instance the roles played in many cases by brain tumors, various infections, spontaneous hypoglycemia, cerebro-vascular anomalies, especially as revealed by angiography, and minor lesions of the temporal lobes, particularly in psychomotor seizures. This process may be expected to continue —perhaps eventually all seizures may be shown to be symptomatic, but of this we cannot be sure. It is at least possible that there will be an irreducible remainder of a sort of epilepsy truly primary, an inborn, perhaps hereditary, convulsive diathesis. Only the future can decide this question.

Electroencephalography

The recording of the action currents of the cerebral cortex is one of the major neurologic achievements of recent years. Electroencephalography throws light on many different diseases of the brain, but its greatest usefulness to date has been in the study of the epilepsies. The following account can be considered only the briefest and sketchiest outline of the contribution of electroencephalography to our knowledge of the epilepsies.

The normal electroencephalogram reveals a series of irregular waves varying in frequency between 8 and 12 per second, the so-called alpha-rhythm. The normal tracing exhibits none of the markedly slower waves, called the delta rhythm, no paroxysmal discharges or rapid or slow high voltage waves, and no build-up of voltage upon hyperventilation by the patient.

The abnormalities seen in the epilepsies consist of changes in the basic frequency—either faster or slower—of the alpha rhythm, and the appearance of paroxysmal bursts of high voltage, high frequency waves, or of high voltage, slow waves each preceded by a sharp spike—the so-called spike and dome pattern. The much slower "delta waves," with or without spiking, suggest a destructive lesion of the underlying cortex. In addition sharp spikes may appear singly and in irregular sequences. These latter are especially apt to appear during sleep, as pointed out by Gibbs. Such paroxysmal bursts and single spikes usually appear simultaneously over all areas of the cortex in cases in which the clinical manifestations are generalized, but arise in localized areas when focal types of clinical seizures are noted.

It would be most fortunate if the abnormalities seen in the E.E.G. could be clearly correlated with the clinical types of convulsive disorders. In the nature of the clinical phenomena, this is manifestly impossible. In the first place too many patients show more than one clinical type of seizure. Attacks of petit mal occur more often in childhood, grand mal and the psychomotor types more often in later life, but the majority of patients exhibit more than one type of seizure. As a matter of fact, an abnormally rapid basic frequency, and paroxysmal bursts of rapid, high voltage waves tend to occur in patients whose disorder is predominantly of the grand mal type, while a slow basic frequency and paroxysms of "spike and dome" waves are seen chiefly in younger patients with petit mal, but the correlation is by no means absolute. Some patients are seen in whom the exact reverse relationship exists. There is a high correlation between the occurrence of isolated sharp spikes in the anterior temporal leads and some form of psychomotor attacks, but here again, grand mal seizures may predominate in patients with this type of abnormality in the E.E.G. It is therefore important to remember that the types of clinical seizures and the types of E.E.G. disturbances are not precisely measures of the same thing, and cannot be equated with each other. Hence, it is wrong to speak of "grand mal tracings," "petit mal tracings," and "psychomotor tracings," because of this lack of sure correlation, and, more importantly, because the terms "grand mal," "petit mal," and "psychomotor attacks" are clinical or phenomenological terms, and are in no sense descriptive of a tracing. Just as electrocardiologists have wisely restricted themselves to terms descriptive of the electrocardiographic tracings (e.g., "prolonged PR interval; inverted T wave," et cetera), so it would be preferable if our electroencephalographers gave us readings descriptive of the E.E.G. tracings, and abjured any clinical or etiologically diagnostic terms. One gets hints of a diagnosis from E.E.G. tracings; one never gets etiologic diagnoses. These can only be made upon the study of all available data—historical, clinical, electroencephalographic, chemical or other.

It would be even more fortunate if therapy could be prescribed from the E.E.G. tracings. But if the final diagnosis cannot be read from the tracings, the therapy can even less be deduced from them. This fact is perfectly obvious from the diverse etiologic factors which may produce epileptic phenomena, since, where possible, therapy must be directed to causes, and not to results. Furthermore, even in those cases in which no "causes" can be found, in the "cryptogenic" epilepsies, it is by no means true that "grand mal" seizures, or E.E.G. tracings with "fast basic frequency with paroxysmal bursts of high voltage spikes" always call for one type of medication, while "petit mal" seizures and tracings with "slow basic frequencies and spike and dome waves" call for another type. And finally, a wide clinical experience, with the freest use of electroencephalography leads the writer to the opinion that therapy can be much more accurately determined on a basis of clinical data without the help of the E.E.G., than on a basis of E.E.G. data without clinical study.

Treatment of the Epilepsies

The therapy of the epilepsies is so vast a field and involves so much of the whole of neurology as to be beyond the scope of a single article. It is perfectly obvious that therapy must be individualized to meet the unique needs of each patient, to strike at the causative factors in all their diversity, from brain tumor to uremia, from sub-

dural hematoma to alcoholic intoxication, from cerebral aneurism to hypoglycemia. It would be impossible to treat of all these conditions here; we must restrict ourselves to the diagnosis and treatment of those cases of epilepsy which appear cryptogenic, after all diagnostic methods have failed to reveal any special cause.

The diagnostic study to be employed in any given case of convulsive disorder cannot be rigidly stereotyped. A meticulous history of the origin and development of the patient's convulsive and all associated symptoms—headache, visual difficuty, motor and sensory phenomena, et cetera—gives one a strong lead at the start. This should include careful inquiry into the past medical and family history. What is the age, the sex, the station in life and the work of the patient, and what were the circumstances attendant upon the first and subsequent attacks, as well as the precise details of some one, specific well-observed seizure? A careful general physical and thorough neurologic examination is indispensable, and will strongly suggest the subsequent special studies to be employed. These usually will include blood count, urinalysis, blood chemistry including fasting blood sugar estimation, blood Wassermann test and electroencephalography. X-rays of the skull will hardly ever be dispensable, and examination of the cerebrospinal fluid should be done unless contra-indicated by papilledema. Often an electrocardiogram will be desired; sometimes a glucose tolerance test. Pneumoencephalography (or ventriculography if a brain tumor is seriously considered) will be helpful if evidence of focal disease of the brain is at hand. Many other studies of a more recondite or unusual nature may be suggested by special features in the individual case.

The treatment to be used will follow logically after the penetrating diagnostic survey has indicated a specific cause for the seizures. Therapy in such symptomatic epilepsy will demand the widest general medical and neurologic skill, and may require the help of one's medical and surgical colleagues in other fields. Where treatment cannot be brought to bear upon the revealed specific causes, palliative anticonvulsant management and medication must be employed. Similarily, where no "causes" can be discovered, and cryptogenic epilepsy remains the only attainable diagnosis, these palliative drugs and procedures are available. Today the range of modern therapeutic agents for the control of convulsive states gives us a wide and generally effective choice.

Phenobarbital is still probably the best all-round anticonvulsant, applicable to the greatest diversity of seizure-types and productive of the least undesirable side-reactions. The adult dosage usually ranges from ½ grain to 1½ grains three times a day, with proportionately smaller amounts for children. It is frequently helpful to combine phenobarbital with other drugs to be mentioned below. Although a sedative, this property of the drug is rarely very troublesome in the epileptic patient. Phenobarbital is especially effective in reducing or abolishing the severity and frequency of grand mal seizures. It is much less effective against petit mal and psychomotor attacks, although sometimes valuable here, too. Furthermore, it acts promptly, unlike some of the other drugs, and may be used, in the form of its sodium salt, in intravenous or intramuscular injections, for the treatment of such acute emergencies as status epilepticus no matter what the cause. Other barbiturates, such as sodium amytal, may be even more prompt and effective in these emergency conditions. It is important to remember that the sudden withdrawal of phenobarbital in cases in which it has been regularly employed, either as an anticonvulsant or simply as a sedative, may precipitate severe convulsive phenomena —the so-called "withdrawal seizures." Barbiturate addicts, deprived abruptly of their drug, often suffer withdrawal seizures, and changes in the medication of epileptic patients must be done slowly and with "over-lapping" of the old and new agents.

Dilantin, a much more slowly acting anticonvulsant, is especially valuable in the treatment of grand mal seizures of cryptogenic origin. It is much less effective against petit mal, and against those major seizures which result from gross brain disease such as the spastic paralyses of childhood, neurological syphilis, and brain tumor. Dilantin given by mouth does not become fully effective for perhaps a week after administration is started, so that if it is being substituted for phenobarbital the latter must be continued for a week after Dilantin is begun. Dilantin is probably most effective when combined with small or moderate doses of phenobarbital. For adults, the average dose is 0.1 gram thrice daily but up to twice that amount may sometimes be given. Toxic effects commonly noted are a spongy hypertrophy

of the gums, which often results from average therapeutic doses, ataxia in walking, which sometimes occurs from large doses, and, rarely, various rashes seen in susceptible persons. Destruction of blood cells has been noted very infrequently. All in all, Dilantin is a most valuable agent against grand mal, especially when combined with phenobarbital.

Mesantoin, a modified Dilantin, has essentially the same action. It is, however, not so effective, dose for dose. In general twice as much Mesantoin must be given as Dilantin to achieve similar anticonvulsant results. Like Dilantin, it is most effective when used against major convulsive seizures of cryptogenic type, and much less valuable for petit mal or seizures due to organic disease of the brain. It does not cause sponginess of the gums, even when its dosage is as high as 0.1 gram six times a day, and ataxia rarely follows its use. It is occasionally, however, more seriously toxic in causing hepatitis or destruction of the blood elements. Thus patients receiving it must be watched carefully for signs of these disturbances, rare though they may be.

Tridione is the only drug which has a routinely significant effect against petit mal, and even against that seizure type it is not very effective in adults. It is given in doses of 0.3 gram two to four times daily, or smaller in small children. It has the disadvantage that when used in cases of both grand mal and petit mal, it may stop the latter, only to leave untouched, or even apparently to increase, the grand mal. Unfortunately, it is not easily combined with Dilantin, which leaves petit mal largely untouched, since the two drugs, when used together, seem to cancel each other out in therapeutic effect. It may be combined with phenobarbital with some effect in such cases of both grand mal and petit mal. Like many other newer drugs, it may occasionally damage the blood cells, producing aplastic anemia and agranulocytosis. Thus, patients receiving it must be carefully followed with this in mind.

Phenurone, one of the newest drugs in the treatment of convulsive disorders, is chiefly of value against psychomotor attacks, a type largely unresponsive to any other drug. It may be given in doses of 0.5 gram thrice daily, and may prove effective also against the grand mal sometimes associated with psychomotor epilepsy. Like other drugs, it is not always a perfect remedy. Its efficiency may sometimes be increased by combination with Dilantin, less often by combination with phenobarbital. Its toxic properties are occasionally alarming, since various mental disturbances and even psychoses may result from its administration, perhaps in 25 per cent of cases. It may also rarely cause blood destruction. Because of these toxic maifestations, Phenurone was kept off the market for two or three years pending careful experimental work and clinical reports. Used cautiously, however, it plays a useful role against a type of seizure not significantly amenable to any other drug.

Bromides, the oldest anticonvulsant, must not be forgotten, since it may assist materially against any type of seizure for which no other drug is adequate. Conservative dosage is grains 5 to 15, three times daily. It is usually best employed in conjunction with other agents. Because it, too, in large doses over long periods, may cause well-known toxic symptoms—the bromide rash, the bromide psychosis—it must be given with caution, and patients receiving it should be watched carefully. It has, however, no significant blood-destroying effect.

Other drugs, less noteworthy, may sometimes be of service, alone or in ancillary roles. The antihistaminics, and especially Benadryl, are at times useful in cases in which an allergic factor is operative. Such cases are very rare. Caffeine is occasionally helpful in combatting the somnolence of phenobarbital or bromides, and the same may be said for amphetamine. This latter drug is often of real help in controlling the difficult psychomotor attacks, preferably combined with other agents.

The ketogenic diet, introduced by Wilder some twenty-five years ago as an anticonvulsant measure, had a great vogue for several years, but has all but been abandoned. It has been abandoned chiefly because it was never very effective. It served at best to reduce the number of petit mal seizures in about 30 per cent of the cases in which consistent and adequate ketosis could be maintained. It had little effect except in children with petit mal, being of little or no aid in any other type of seizure or for other age groups. The greatest difficulty was in maintaining ketosis with a ratio of 2:1 between ketogenic and antiketogenic foods in average homes, considering the expense and unpalatability of the diet, and the practical difficulties of calculation and measurement. The introduction of the much more

effective Tridione at once made the ketogenic diet obsolete and unnecessary, although there are a few cases in which the toxicity or ineffectiveness of Tridione make it worthwhile to try the diet. It thus may fill a small need in a limited sphere.

To mention dehydration, once touted as a treatment for epilepsy, is to dismiss it. It has little or no value for obvious physiologic reasons, chief among which is the superb power of the kidney to maintain a stable water balance despite all our efforts. In all cases of epilepsy it is important, however, to avoid hydration. Seizures may be induced in epileptic patients by forcing fluids while administering the pituitary anti-diuretic hormone. Alcoholic indulgence, leading to "wet-brain," is similarly contraindicated for convulsive patients.

Cortical excision or lobotomy must be discussed as a modern method of combatting the convulsive disorders. Operations of this type are useful only in those cases in which a focal origin for the seizures can be demonstrated—i.e., in the Jacksonian and psychomotor epilepsies. Even in these, it is obvious that surgical attack is appropriate only after all simpler methods have failed or have been proved inadequate. The focus must first be most accurately determined, not only by clinical analysis of the seizures, but also by electroencephalography and electrocorticography, and confirmed by an experimental reproduction of the seizures by cortical stimulation. Naturally, therefore special techniques, in the hands of well-trained and experienced neurosurgeons, are a prerequisite to such operations. Furthermore, in the case of Jacksonian seizures, the focus, when determined, must not be removed if it chances to lie in an area of the cortex which is indispensable—such as the motor speech area.

Special mention must be made of the removal of the anterior end of the temporal lobe in cases of psychomotor epilepsy. Such removal has been proved effective in a few cases in expert hands, but here, again, only after careful determination of the focus. If the focus lies in both temporal lobes operation is not indicated, and great caution must be exercised if the "dominant" temporal lobe is the offender, lest aphasia result. In some cases, a tumor may be found at the discharging site. In this case, the removal of the tumor rather than lobotomy is the procedure to be followed. For emphasis, surgical operations are contraindicated (except in the case of removable tumors) unless and until all other methods have failed.

Conclusion

The diagnosis and treatment of the epilepsies are, as we have seen, extremely complex and difficult, demand an application of widely diverse elements of medicine and neurology, and offer a great field for further research and experimentation. There is no "short cut" around these great difficulties, certainly not through electroencephalography or any other single technique. The practitioner must summon all his ingenuity and must use all that the whole science of medicine places at his disposal. He must therefore be a thorough and alert clinician; he cannot be a narrow technician or specialist.

RECURRENT ACUTE INTUSSUSCEPTION

(Continued from Page 602)

years of age are especially susceptible. There are four primary features of the disease:

1. Paroxysmal attacks of abdominal pain.
2. Vomiting.
3. Blood streaked stools.
4. Palpable abdominal mass.

Recurrent acute intussusception is rare; such a case is reported.

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The Health Study of the Detroit-Windsor Air Pollution Investigation

By Joseph G. Molner, M.D., M.P.H., and Alan S. Rabson, M.D.

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THE PURITY of the air we breathe is rapidly becoming a subject of great importance to all concerned with the health and well-being of people. Apprehension concerning the health effects of atmospheric pollution has been intensified in recent years by the occurrence of three major smog disasters.

The first of these occurred in the Meuse Valley of Belgium in December of 1930.[1] At that time, approximately sixty-three deaths and a large number of illnesses were attributed to a dense irritating smog which covered the valley for several days. It appeared to some observers that most of those affected were elderly and that many were patients with chronic pulmonary and cardiac disease. Nevertheless, there were illnesses among previously healthy adults and children. The symptoms most frequently seen were dyspnea, paroxysmal cough, lacrimation, retrosternal pain, nausea and vomiting. Necropsies of the fatal cases showed diffuse congestion of the mucosa of the entire respiratory tract. A specific chemical contaminant has never been clearly shown to have been responsible for the mortality and morbidity, although fluorides, sulfur dioxide, and several other chemicals have been suggested.

The second of these incidents took place in the town of Donora, Pennsylvania, in October of 1948. For several days a dense irritating smog covered the town. During this period there were twenty deaths and a large number of acute illnesses attributed to the atmospheric pollution. The symptoms most frequently seen were smarting of the eyes, sore throat, cough, dyspnea, headache, nausea and vomiting. Again, those elderly patients with chronic pulmonary and cardiac disease were most frequently and most severely affected. Studies of the Donora disaster were undertaken by the U. S. Public Health Service[2] and by other groups[3] and the findings have been reported in several recent publications. The U. S. Public Health Service investigators felt that the cause of the episode was the accumulation in the atmosphere of chemical irritants. They did not feel that any one agent could be indicated as the specific cause of the morbidity and mortality. The reason for the unusual accumulation of contaminants in the atmosphere during the period in October, 1948, was thought to be the prolonged presence of a meteorologic condition known as a temperature inversion. Temperature inversion refers to a meteorologic situation in which the usual decrease in temperature with elevation is not present. Therefore the usual upward flow of air which carries away contaminants is absent, and the accumulation of irritating substances can take place.

The third major air pollution disaster took place in Poza Rica, Mexico, in September of 1950.[4] Large amounts of hydrogen sulfide were inadvertently liberated into the atmosphere at a time when the available meteorologic data indicated the presence of a temperature inversion. In a very short time, the exposure to this atmospheric pollution resulted in twenty-two deaths and the hospitalization of 320 people.

Although it is thus well established that there have been deleterious effects on health in these acute smog disasters, the health effects of prolonged exposure to lower concentrations of atmospheric contaminants are not clear. Dorn[5] has recently stated, "The time to study the relationship of air pollution to health is before rather than after the acute outbreak occurs. Long time statistical studies of morbidity in communities with appreciable air pollution and in communities relatively free of air pollution must be conducted if a reliable measure of the effect of air pollution is to be obtained."

The opportunity to perform such a study recently arose in the Detroit-Windsor area.[6] The International Joint Commission of the United States and Canada, which was established by treaty in 1909, received a reference from the two nations in 1949 regarding the problem of air pollution in the Detroit-Windsor area. As part of an investigation which was to be under the direction of a Technical Advisory Board of the International Joint Commission, it was proposed that a study to determine the effects on health of prolonged ex-

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posure to atmospheric pollution be initiated. This health study was to be performed by the health departments of the City of Detroit, the Province of Ontario, and the City of Windsor with the assistance of the Canadian Department of National Health and Welfare, and the U. S. Public Health Service. The basic plan was to conduct a long term morbidity survey in areas of both high and low atmospheric pollution to determine whether morbidity was significantly increased in areas of high atmospheric pollution.

It was recognized by the committee on the health study that an investigation of this kind would have to be planned and executed very carefully if dependable results were to be obtained. Other factors known to influence morbidity, such as age, sex, race, income, occupation, and diet, would have to be carefully controlled so that the only significant variable in the two populations being studied would be the degree of atmospheric pollution in their communities. It was also recognized by the committee that the health effects of air pollution might be so gradual and so subtle that their identification, apart from other conditions which influence morbidity rates, might be extremely difficult or impossible; however, this could never be determined without a trial study.

An attempt was made, therefore, to select several pairs of areas in Detroit and Windsor which had populations of similar socioeconomic character but which differed greatly in their degrees of atmospheric pollution. The selection of the study areas in Detroit was under the direction of Dr. W. Gafafer and Dr. H. Brinton of the Division of Occupational Health of the U. S. Public Health Service. Selection of study areas in Windsor was under the direction of Dr. A. Peart, Mr. W. McEwen and Mr. G. Josie of the Canadian Department of National Health and Welfare.

In Detroit, the smallest geographical unit which was thought to be practical for study was the census tract. An attempt was made, at the onset, to characterize approximately the socioeconomic status and degree of air pollution in each of the 369 census tracts of Detroit.

In the study of the socioeconomic status of each of the tracts, a large fund of available information was utilized. For each census tract, the census data provided information as to the median years of schooling, the percentage of people who were foreign born and nonwhite, the percentage of homes with mechanical refrigeration, and the percentage of homes which were owner occupied. Economic ratings were obtained for each tract from a sample survey conducted by one of the city newspapers several years ago. The Council of Social Agencies made available current data on general relief cases, aid to dependent children, and old age assistance according to census tracts. The juvenile court furnished data on the residences of youthful offenders. Health department records furnished total death rates, infant death rates and tuberculosis death rates in each of the tracts. These data were then transferred to census tract maps by appropriate shading. What at first appeared to be a heterogeneous mass of unrelated facts gradually could be seen to show a rather definite pattern and each of the tracts could be approximately characterized with respect to the socioeconomic status of its residents.

With the co-operation of the city smoke inspectors, similar census tract maps were prepared showing the location and character of each of the major air pollution emission sources. It was thus possible to visualize, in an approximate way, where the atmosphere was being contaminated and what the principal types of contaminants were in each area.

After study of these two types of maps, fifty-two census tracts were chosen as being of possible value in the selection of paired tracts for the morbidity study. Because of the association of atmospheric pollution with socioeconomic status, a number of census tracts could not be used in the study. The lowest socioeconomic status of a census tract with light atmospheric pollution set a limit below which no attempt could be made to match tracts. This resulted in the elimination of certain very poor populations living in areas of very high air pollution, since tracts with as low a socioeconomic status could not be found in any of the areas of light air pollution. On the other hand, the best socioeconomic status of areas of high air pollution set an upper limit and determined the maximum degree of socioeconomic well-being that could be accepted in areas of low air pollution, thus eliminating certain wealthy areas.

Actual visitation and inspection of each of the fifty-two tracts described above was then carried out. From the fifty-two tracts, twenty-eight were chosen as being suitable for selection of pairs of similar socioeconomic status but contrasting degrees of air pollution. These twenty-eight tracts then were intensively studied from the standpoint

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of atmospheric contamination with a number of instruments and methods. These environmental studies were under the direction of Mr. G. Clayton and Dr. W. Fredrick in Detroit and Dr. Morris Katz in Windsor. Sampling sites in each of the census tracts were very carefully selected with emphasis placed upon their being as representative as possible of the entire tract. In two six-week studies, daily air analyses were performed in each of the twenty-eight tracts. These included daily determinations of suspended particulate matter as well as determinations of such gaseous contaminants as sulfur dioxide, fluorides, chlorides, carbon monoxide and aldehydes. The particulate matter collected at each of the stations each day was analyzed both chemically and spectrographically. Similar studies were carried out simultaneously in Windsor. While the air sampling was in progress, meteorologists made detailed studies of the daily weather for later correlation with the environmental data. The census tract map of Detroit (Pages 628-629) shows the median daily weight of particulate matter in each of the tracts included in the first six-week study. Detailed reports of the two six-week studies are now being prepared.[7]

The final selection of the pairs of census tracts to be used in the morbidity survey in Detroit has been deferred until the complete data on population characteristics in the 1950 census are available. In Windsor, two areas of similar socioeconomic structure but contrasting degrees of atmospheric pollution have already been selected.

The actual methodology of the proposed morbidity survey has been the subject of a great deal of discussion. Although the technique of morbidity surveying has been used extensively in a variety of problems, we know of only one small previous study in which it was used in an attempt to detect the health effects of atmospheric pollution.[8] Therefore, such problems as the most suitable type of questionnaire, sampling methods, enumerators, and frequency of enumeration as well as countless other methodological problems are as yet unanswered. In planning our study, we have made extensive use of the information already available in the literature on morbidity survey techniques. Nevertheless, there remain a large number of specific problems in an air pollution morbidity survey which can be answered only by careful trials in a field study.

Pretests of several types of questionnaire have already been initiated in both Detroit and Windsor, and a pilot study in areas of similar socioeconomic status but contrasting degrees of air pollution will begin in the spring of this year. The pilot study will include approximately 500 families in Detroit and 350 families in Windsor. If the pilot study appears to be operating satisfactorily, the sample size subsequently will be increased to insure results of statistical validity.

Although the major study in the project is to be the family sickness survey described above, a number of supplementary studies also are being planned and initiated. These include the daily collection of morbidity data from certain especially vulnerable groups such as patients with bronchial asthma and cardiac disease. Simultaneously, daily determinations of atmospheric contaminants are being carried out, and it is planned to study the relationship of the morbidity data to the daily levels of atmospheric pollution. School and industrial absentee data also will be utilized in similar analyses.

It should be emphasized that the entire study is a single investigation taking place in both Detroit and Windsor, and that the field study on both sides of the Detroit River is under the direction of a single epidemiologist. The excellent co-operation that has existed among the officials of both nations indeed has been encouraging.

Summary

A brief review of experiences in three major smog disasters has been presented, and the importance of studies on the effects of prolonged exposure to lower concentrations of atmospheric contaminants has been emphasized. The historical background of the Detroit-Windsor Air Pollution Investigation has been outlined and the design of the proposed health study described.

Acknowledgments

The efforts of a large number of individuals in both Canada and the United States made the planning of this study possible. Gratitude is due to Dr. C. Anderson and Mr. J. Oliver, of the Detroit Health Department, and Mr. B. Linsky of the City of Detroit Smoke Abatement Bureau, in addition to those individuals cited in the text.

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The Acutely Inflamed Eye

By Peter C. Kronfeld, M.D.

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AS THE representative of ophthalmology at this meeting I feel embarrassed at not being able to present a more significant or more original topic. I wish I were in a position to tell you here today about the solution or hope of solution of one of our major problems, such as the diabetic retinopathy or the prevention of senile degenerative diseases of the eyes. Unfortunately I have nothing really encouraging to report with reference to either of these problems.*

The only excuse for bringing up the trite topic of acute ocular inflammation again is that the incidence as well as the type of acute inflammatory eye disease has changed very materially and steadily during the last twenty years. Some truth and at the same time some glamour could be added to my title by making it "the acute inflammatory eye disease of 1952."

The change has come about largely as the result of two factors: (1) the steady improvement in the state of general health of the nation, and (2) the greater efficacy of antiinfective drugs, specifically the sulfonamides and the antibiotics. The impact of these factors upon ophthalmology has been most noticeable in the field of acute inflammatory diseases, some of which have become almost extinct while the course of others has been reduced to mild, brief episodes. Some diseases not influenced by either one of the two factors have become relatively more prominent. Finally some new diseases or new etiologies have become recognized. Thus the face of ophthalmology has changed. To describe briefly these changes in the incidence and type of acute inflammatory eye diseases as they have occurred during the last ten years will be my topic.

The bulk of the acute inflammations is made up of cases of acute catarrhal or mucopurulent conjunctivitis. The incidence of this condition in the population has probably decreased somewhat as the result of better personal hygiene. The principal change that has occurred in the field of acute conjunctivitis is the practical disappearance of the serious form of acute conjunctivitis, specifically the gonococcal type. While in the gonorrheal ophthalmia ward of Cook County Hospital in Chicago the incidence of bacteriologically verified cases of gonoblenorrhea between 1935 and 1939 was about 150 cases a year we now see one or two cases a year. The last new case of corneal complication of gonoblenorrhea was seen there five years ago. Gonococcal infection of the human conjunctiva has ceased to be a menace, and the same holds true for most forms of severe bacterial conjunctivitis. By having gained better control over the extraocular disease of which the conjunctivitis is a secondary manifestation, and by having gained better control over the local condition, a good many forms of conjunctivitis are being prevented, aborted, or greatly reduced in severity. Topical application of sulfonamides and antibiotics has proved strikingly effective against bacterial invaders and, at the same time, kind to the conjunctiva and cornea.

The ordinary garden variety of acute conjunctivitis, the condition called pink eye by lay people, is here in the Middle West most frequently caused by the pneumococcus. While the textbooks are undoubtedly right in saying that most of these forms of conjunctivitis are self-limited and clear up without any treatment, it is important to remember that the staphylococcus which ranks second in frequency as causative agent in acute conjunctivitis, is likely to set up a chronic blepharoconjunctivitis if not treated energetically in the beginning.

It is also important to remember that there exists a rather innocent looking acute conjunctivitis that can become quite a problem by its contagiousness, its duration, its corneal complications and its refractoriness to treatment. It is the so-called epidemic keratoconjunctivitis due to a well-defined virus which made its first, large-scale appearance in the United States as shipyard conjunctivitis in 1941 and became a serious industrial problem in 1942. The high communicability is due to the ability of the virus to survive drying and dilution. No other infection has produced a comparable number of infections in doctors and nurses or a comparable degree of office and clinic transmissions. Transmission of the disease has been shown to have occurred by the following means: (a) contaminated tonometers, (b) con-

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*In the January-February, 1953, number of *Diabetes* (Journal of the American Diabetes Association), Poulsen reported recovery from retinopathy in a case of diabetes complicated by Simmond's disease.

taminated ophthalmic solutions, including pontocaine, cocaine-adrenalin, and homatropine, (c) direct finger to eye transmission and (d) in industry by welders' masks, goggles and common tools. After several years of just sporadic occurrence the disease became epidemic again in California in 1947 and may do so again at any time. The incubation period is seven to ten days and no form of treatment is strikingly effective. The early symptoms may be much more impressive to the patient than to the physician. They are lid and conjunctival edema, especially of the caruncle and plica, with mild hyperemia and only scanty discharge in which mononuclear cells predominate, plus a very definite swelling and tenderness of the preauricular gland. In any situation resembling this picture the most important consideration is prevention of spread of the disease. The outcome is usually favorable, both as far as vision and the functional integrity of the conjunctiva are concerned.

What has been said here about the bacterial forms of conjunctivitis applies more or less to the corresponding diseases of the cornea. Again sulfonamides and antibiotics have been wonderfully effective in preventing, nipping in the bud or arresting some of the formerly very serious and destructive forms of ulcerative keratitis.

Two forms of acute keratitis that used to contribute a major share of the acute ocular inflammations, have almost completely disappeared from the offices and clinics of the United States. These are phlyctenular disease and interstitial keratitis due to prenatal syphilis. The disappearance of the latter is to be credited largely to nation-wide improvement in prenatal care and the institution of prenatal antisyphilitic treatment when indicated.

Cases of phlyctenular conjunctivitis and keratitis used to fill whole wards of the eye institutions of this country and of Europe. The disease has become practically extinct in the United States as the result of more effective management of childhood tuberculosis and as the result of the correction of dietary deficiencies. Phlyctenular disease is still fairly common in Alaska where the death rate from tuberculosis has been said to be nine times that of the United States.

By the elimination of other forms of keratitis rather than by an increase in its own rate of occurrence herpetic keratitis has become the most important keratitis of these times. A direct effect of inoculation with herpes simplex virus, this form of keratitis can become a serious problem principally because of the inefficacy of all known forms of treatment once the virus has gained access to the deeper layers of the cornea. The majority of us carry antibodies against herpes simplex and probably also harbor the virus in body fluids such as saliva. A trigger mechanism such as a cold, menstruation, et cetera, is usually operative in activating the virus and facilitating its entry into the cornea. It is most important to recognize the disease in its earliest stages, which are characterized by dendritic, superficial corneal infiltrates. A strong disinfectant such as tincture of iodine, applied generously to the diseased portion has an excellent chance of destroying the virus unless it has already invaded the deeper layers of the cornea.

No appreciable drop seems to have occured in the rate of incidence of acute iritis, the disease caused usually by bacterial allergy and only rarely by an actual bacterial metastasis. The topical application of cortisone has greatly mitigated the course of the disease and thereby markedly reduced the clinic or office visits or days of hospitalization necessary to make the iritis subside.

Most of the acute bacterial inflammations of the inner eye, the so-called endophthalmitides, are responding to antibiotics, irrespective of whether they are endogenous or ectogenous in origin. There we have another example of an ocular disease, the outcome of which used to be a blind shrunken eyeball and nowadays often is an almost normal eye. The subconjunctival route of application of antibiotics has proved particularly effective in these cases.

Acute congestive glaucoma is still with us, unchanged in frequency or severity. Alarming as its symptoms may be our understanding of the mechanism of the disease has become so much better and our methods of treatment so much more effective that the ophthalmologist almost welcomes an early case of acute congestive glaucoma. Promptness of recognition and of institution of treatment is the principal factor determining the outcome.

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Diagnosis of Occupational Disease

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A RULE for the diagnosis of occupational disease was laid down in the 17th Century by Ramazzini. He bade the physicians in Italy, when they had a case of illness in a working man, not to ask the patient only about his symptoms but to go carefully into the details of his occupation, for without this knowledge, a correct diagnosis could not be made. As in any disease, it is the duty of the physician attending the patient to make proper diagnosis, to institute proper therapy, and to advise as to preventive measures to avoid exaggeration or recurrence of the disability.

Ramazzini's advice is still needed today, for too frequently inquiry by the physician into the occupation of his patient is neglected or is satisfied by recording on the medical record the words "laborer," "machinist," or "foundry worker," which then comprise the total information considered.

The number of those gainfully employed in the United States is estimated to be in the neighborhood of 65,000,000 people, and for practically every occupation or profession some type of occupational hazard exists. The typist and the telephone operator may be exposed to fumes of solvents used in cleaning the type keys or electrical contacts. The tailor and laundry worker may be subject to carbon monoxide from defective flatirons and inadequate ventilation. Where the gainful occupation is itself safe, and is carried on in a hygienic environment, the patient not infrequently becomes a victim to unsuspected exposure incident to pursuits carried on as under guise of hobbies, recreation, or household duties.

Medical diagnosis requires meticulous detective work, for each patient has his own particular occupation, profession, work environment, or hobbies which will suggest to the physician special lines of inquiry. Initial evaluation of occupational factors belongs to all physicians, and, where indicated, further study may be relegated to the industrial physician and others with added experience with specific occupational diseases.

Workman compensation legislation is now nationwide. This places before the medical profession an inescapable responsibility to render to patients a medical diagnosis which includes a balanced consideration of the factors of employment or occupation which may produce or aggravate medical conditions.

Occupational History

The initial approach in the diagnosis of occupational disease is similar to that used for any disease. History taking is all-important. It must be detailed and contain a historical summary of all the occupational activity. This includes attention to the exact nature of the operation in which the patient is currently engaged, and the work activities carried on by others in the immediate work environment. In some instances of suspected chronic poisoning, the occupational history should cover the patient's entire work history starting with his first gainful employment, for materials such as silica dust or manganese dioxide may produce signs and symptoms after exposure has terminated.

Many workers are prone to classify themselves by giving a title. Such titles as "miner" or "welder" do not necessarily reveal the actual nature of the work performed. To note merely that a worker is a miner does not constitute an occupational history unless specific job, duration of service, and type and location of the mine are also recorded. A welder, on the other hand, should be asked the nature of the metals that he burns, the type of welding arc used, and questioned as to the extent and kind of protective control measures in use on the job.

The patient commonly makes his own diagnosis which is presented to the physician with the words: "I have been poisoned by the fumes in the shop." Inquiry frequently reveals that the patient has little or no knowledge of the composition of the "fumes" or of the nature of the materials used in the job. The physician will do well to heed the opinion of his patient but reserve "diagnosis" until the exact nature of the materials and processes encountered by his patient are known. It is equally fallacious to assume that where known toxic materials are present or involved all disability can be attributed to this cause.

Materials and Processes

If the occupational history, together with the symptomatology, suggests a toxic exposure, further diagnosis will be facilitated if the concentration

and composition of the material or mixtures of compounds is established. Various agents which fall under suspicion in the work history may prove to be relatively or completely inert in the form, concentration, or duration of exposure encountered. Many occupational diseases are insidious in their onset but will, as a general rule, develop while the workman is still exposed to the causative agent. Silica and benzol, however, represent materials which may not produce clinical manifestations until many years after initial exposure.

Concentration and Duration

The ability of the body to detoxify noxious agents is dependent in part on the rate of absorption of the material in question. The absorptive rate in turn is related to the route of entry into the body and varies widely—be it skin, gastrointestinal, or respiratory tract—and will likewise be influenced by the physical state of the noxious agent, its concentration, and by the type and duration of exposure. Daily exposures of low concentrations of benzol over a long period of time may cause severe depressions of the hemopoetic system, while high concentrations produce rapid narcosis without significant effects on the blood-forming organs. Fumes of the oxides of nitrogen may precipitate a fatal pulmonary edema in higher concentration, while only slight irritation of the mucous membranes of the upper respiratory tract follow repeated low grade exposure.

Functional and Structural Pathology

For each toxic material, a specific reaction or pattern is predicted. Some substances primarily affect the respiratory tract, others the central nervous system, the blood-forming organs, or the kidney or liver. Once a particular agent has come under suspicion, specific functional tests or diagnostic tools come to mind to attack and pinpoint potential resultant pathology.

Clinical and Analytical Laboratory Methods

Medical diagnosis would be greatly facilitated in occupational disease if it were possible to demonstrate the presence of most toxic materials in the body fluids. Unfortunately, relatively few agents can be easily identified; for many others the analytic method is either not readily available, or the laboratory approach is through nonspecific tests. Many of the volatile substances are rapidly eliminated from the body so that the interval between exposure and laboratory analysis modifies or nullifies the value of the procedures available. Laboratory data, however, if used in conjunction with the occupational history and clinical findings, provide important and valuable confirmatory evidence in arriving at a correct diagnosis. For example, lead and mercury may be recovered directly from body fluids, while the arsenic content can be determined in the feces and in the hair. The intensity of the exposure to benzene and other materials, however, may be inferred from the determination of its metabolites such as the urinary ethereal sulphate ratio. Carbon tetrachloride, for which there are no specific qualitative tests in blood or urine, may be inferred if exposure history is correlated with clinical laboratory tests which reveal impaired liver function. Mercury can be detected directly in the urine, or because of its known proclivity for producing kidney damage, its presence may be inferred if abnormal urine findings and functional tests accompany occupational contact.

Indirect Evidence

The finding of similar disability in other persons subject to the same working conditions lends indirect support to the likelihood that an occupational origin may be the basis of disability. However, not all similarly exposed personnel seem to be affected equally. Individual susceptibility will modify the response, as will specific sensitization, coincident disease and organ damage, sex and racial differences.

Plant Knowledge

Occupational disease diagnosis requires some knowledge of the health hazards associated with a particular work environment. The physician will profit from a firsthand acquaintance with the plants of his own community in which his patients spend their working hours. It is often impractical for the general practitioner to know the entire industrial field, nor is it necessary. Further, he is not expected to be trained in industrial hygiene or engineering, nor to be able to use the various collecting and sampling devices used in evaluating the concentration of dusts, vapors, or gases. A plant visit, however, provides the physician with insight into the actual work environment in which his patients are placed and serves to assist him to evaluate the influence of the job on the health and disabilities of his patients.

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Detroit Physiological Society

MEETING OF MARCH 19, 1953

Experiences with Antimetabolites for Nicotinic Acid

O. H. Gaebler and W. T. Beher

Edsel B. Ford Institute for Medical Research, Henry Ford Hospital, Detroit

Pyridine-3-sulfonic acid and 3-acetylpyridine are structurally related to nicotinic acid and become increasingly toxic in dogs depleted of this vitamin. The two compounds have, therefore, been classified as antivitamins. After preliminary metabolism experiments with both compounds (J. Biol. Chem., 188, 343 (1951), 3-acetylpyridine (3-AP) was studied in detail. Dogs receiving 3-AP excreted large amounts of nicotinic acid and biologically active derivatives of this vitamin. Tracer studies in which 3-AP was tagged with C^{13} in the carbonyl group showed that nicotinic acid and derivatives thereof arose directly from 3-AP (J. Biol. Chem. 198, 573 (1952). The toxicity of 3-AP in dogs partially depleted of nicotinic acid may therefore be due to impairment of the mechanism for oxidizing 3-AP to nicotinic acid and other compounds. Further *in vivo* and *in vitro* experiments have given additional information concerning the course and site of metabolism of 3-AP. (Federation Proceedings, 12, 176 (1953), Abstract 572).

Circulatory Shock Syndrome and Acute Cor Pulmonale Caused by Different Kinds of Acute, Disseminated Pulmonary Vascular Occlusions

C. L. Schneider, *Wayne University College of Medicine*

R. M. Engstrom and A. A. Cintron-Rivera, *Wayne County General Hospital, Michigan*

Acute and widespread occlusion of the pulmonary vascular bed was caused in dogs by intravenous injection of extracts of tissue thromboplastin. This initiates massive and disseminated coagulation within the blood stream, and is believed to result in a kind of submicroscopic "fibrin embolism"; i.e., in formation of fibrillae of fibrin, throughout the circulating blood. As an end result, fibrin builds up microscopically demonstrable, intravascular occlusions. These occlusions have a characteristic structure and have a predilection to form in the pulmonary arterial bed. In the present investigation,* blood pressures were recorded through catheters in the pulmonary artery and in the aorta. The pulmonary arterial pressure rose to 50 mm. of mercury; the systemic pressure fell to shock levels. Under direct observation the right heart dilated excessively and the left heart filled inadequately.

In comparative studies, experimental meconium embolism (in which there is an over-all inhibition, rather than an acceleration, of coagulation) caused similar, extreme blood pressure changes and acute cor pulmonale. Consistent with the preformed nature of the meconium occlusions, the blood pressure changes were almost instantaneous. By contrast, the pressure changes initiated by "fibrin embolism" required more than one minute to develop, a time lag consistent with the time needed for building up of the fibrin occlusions. Electrocardiographic recordings in both of these kinds of disseminated pulmonary vascular occlusions were consistent with development of acute cor pulmonale. Fibrin occlusions diagnostic of fibrin embolism have been observed postmortem, after maternal abruptio placentae and after eclampsia. It follows that disseminated fibrin occlusion of the pulmonary arterial bed, and resultant acute cor pulmonale, may be a cause of the circulatory failure that is sometimes observed clinically in these acute disorders of late pregnancy.

*This investigation was supported in part by the Medical Research and Development Board, Office of the Surgeon General, Department of the Army, Contract No. DA-49-007-MD-194.

Editorial

MICHIGAN STATE MEDICAL SOCIETY ANNUAL SESSION
Pantlind Hotel-Civic Auditorium, Grand Rapids
Wednesday-Thursday-Friday, September 23-24-25, 1953
YOU ARE URGED TO ATTEND!

BLUE CROSS-BLUE SHIELD— AN EVOLUTION

HISTORY tells us that great crises have their great compensating reactions. Throughout the ages when a situation has arisen which seems insoluble, there has always been some development which makes us believe it is the natural sequence of cause and effect. Not much beyond the memory of our older practitioners, the trip to the hospital was the last desperate stage before the death of the patient, or so most of them feared. But new facilities and new procedures, both of medical and hospital personnel, have changed all that fear into a growing and unbounded confidence in the better chance of recovery afforded by present-day hospitals.

Progress in medical and hospital care for the alleviation of human ailments during the last two decades has been by leaps and bounds. Hospitals have now become the trusted and accepted place for the care of seriously sick people and for the study and diagnosis of disease.

Modern hospital techniques and modern medical accomplishments have improved the general health of the nation, and at the same time they have added to the cost of being ill. Each new hospital service, each new miracle drug, each improved diagnostic method has necessarily added to the costs.

Two decades ago, this country was going through a condition almost impossible for the modern person to understand. Only a few of our present active generation remember with any vividness the times when for millions there was no work except that manufactured by government and the long-time steady employment of the well-established business interests—and they were struggling to survive. Nearly 50 per cent of the people were completely dependent on doles or made work, with a pittance of remuneration. More than 45 per cent of the medical work done by the practitioners was paid for not at all, or through welfare or relief organizations. It was almost impossible to get a patient into a hospital, unless he was of independent means.

We were in a dilemma which had to be solved. The solution came, as it always must in such circumstances, from the grass roots, and almost spontaneously. The concept of prepayment for medical and hospital care grew from the four corners. Medical societies, medical men and hospital men from every area proposed one scheme after another, with voluntary prepayment most favored.

In Michigan, workers in various county medical societies and on several State Medical Society committees were among those with ideas, and willing to work them out. In Calhoun County, a program was adopted to give complete medical service based on the financial report of a Michigan State Medical Society committee study, only to find just before launching the plan that it contravened the State Insurance law. Eventually, by the passage of enabling legislation and through co-operation of all those interested, Michigan Medical Service was formed. Michigan Hospital Service had preceded Michigan Medical Service by about a year, using the prepayment voluntary service concept. Michigan Hospital Service was a pioneer but was not the first in that field. The prepayment program for hospitals had actually been growing in various parts of the nation, but applied to medicine it was completely unknown. In the medical field, health and accident insurance had been sold by insurance companies for many years. It did not cover our needs, and the insurance companies would not touch the plan being studied by the medical men. Michigan proposed a complete service program. In California, about six months before the Michigan plan was launched, a plan was sold which covered about the same service, but was based on a unit valuation with pro rata payments to be 100 per cent if there were enough money, and otherwise different rates. The 100 per cent payments came very late. We now know that a few county medical societies in the West had sold somewhat similar service for several years, but it had never been published. In Michigan, we were

(Continued on Page 638)

Founded on the Principle of Service

Dedication of this number of THE JOURNAL to Michigan Medical Service suggests that Blue Shield is something of which we are proud; we feel it is providing a service to the public that is unparalleled in the history of the State Society. We can point with pride to the efficient management of the organization and are none the less indebted to Robert L. Novy, M.D., Detroit, for his consistent effort as president of the Service.

The President's Commission on the Health Needs of the Nation "favors this form of financing health services," but suggests devious ways of Federal subsidy to increase its comprehensive coverage. This we cannot agree with unqualifiedly; slow but steady advancement of the benefits received by the purchaser of this Service, of necessity, will have to be the course to be followed.

The sister organization, Blue Cross, also has been commended by the President's commission on "providing a fairly adequate answer to the problem of payment of hospital bills." We, of course, know this to be true; those of us older in the practice of medicine realize how much easier it is now to convince patients of the desirability of entering a hospital for adequate care (with most or all of the cost paid by insurance) than it was twenty-five years ago.

It is possible, however, to kill the goose that lays the golden egg! Over-utilization of Blue Cross benefits is a real hazard to the plan. We physicians can discourage this by not extending the hospital stay of our patients beyond necessary limits. But the patients also have a responsibility in this regard and must remember they are paying the premiums which must be continually increased if privileges are abused. The only alternative. it would seem, would be a restricted rather than a more liberalized contract which would be contrary to the concept of the plan that was founded on the principle of serving the greatest number of people at the least possible cost.

President's



Message

R. J. Hubbell

President, Michigan
State Medical Society

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formulating a completely unknown or untried form of "service insurance."

The experimentation, trial and error, and the anguish of frustration were all part of the "borning" process. Once started, it was of the nature of a social revolution long overdue and inevitable in its arrival. Once the concept was accepted by both a crusading and stabilizing group of evangelistic doctors, the ultimate goal *would* and *did* come even in spite of most heartbreaking opposition.

In October, 1947, the late Senator Vandenberg met with a group of men representing the Michigan State Medical Society and Michigan Medical Service, at his request, to learn more about what we in Michigan were doing "to forestall socialized medicine." After a complete afternoon of shrewd searching questions, he said, "You in Michigan have established one of the great public trusts of the country. You have taken over fifty million dollars of the peoples' money and have spent it for them and their advantage. That is a Public Trust."

Again the June number of THE JOURNAL is devoted to our brain-child, Michigan Medical Service. We and the Service are fulfilling our public trust and our obligations in making this report to our constituents. The report is good.

PROBLEMS:

IN APRIL the Blue Cross-Blue Shield Conference was held in Hollywood Beach, Florida. This is an annual event, started about seven years ago with a small attendance, mostly plan directors, presidents and administrative officers of the voluntary prepayment plans, who met to study methods and means to improve the work of the organization: also to help in starting other plans throughout the nation. Succeeding years have seen more in attendance. Four years ago, many of the directors of the plans attended the Hollywood Beach meeting. They found the occasion both instructive and of distinct value to their own work in administering the plans. About 300 was an unexpected and almost overwhelming attendance. At the 1953 meeting, the attendance numbered well over 800 persons. This shows the interest and devotion to detail of the Board members who predominated in attendance.

There was an excellent program of prepared talks from American Medical Association Public Relations, American Institute of Management, Industry, Labor, Economists, Administration, and the insurance commissioners of several states. Caution was sounded on every hand that overusage or misuse might wreck the structure which had been builded to such heights. Recognition was given by Labor, Industry and Government to the development of the voluntary prepayment method of meeting ever-increasing health costs.

Specifically, mention was made that these plans are not intended for total and unlimited health service, but primarily to care for the catastrophic seizure which might wipe out a family's savings. The simple office call and diagnosis are not intended to be covered. Neither is the hospital meant to be a refuge for unwanted older people so the family can have a weekend party or trip. (This has been done.) Over-staying in the hospital also adds to the costs, particularly in these days when the average costs of hospital stay approach $25.00 or $30.00 a day. One additional day in the hospital for only a hundred of the many thousands of patients costs $3,000.00. Overutilization and over-staying would soon wreck the plan.

A little thought on the part of the attending doctor will easily suggest other misuse of the plans which have meant so much to the stability of the hospitals and the assured income of the doctors who take care of our sick people. Blue Shield or Blue Cross plans are not an impersonal insurance company with money to spend. They are our own personal bulwark against some social changes with which we have been threatened, and which may come again if social conditions change.

Caution was sounded that some serious problems of the voluntary health prepayment plans must be solved while there is a sympathetic administration in Washington. There is a growing demand that financing plans for the unemployed or indigent should be solved to give them the same benefits enjoyed by voluntary subscribers. There should be consideration of plans to care for the aged after they have ceased to work, and are living on retirement funds or allowances which will not be sufficient to pay premiums.

In our present economic system, a considerable part of hospitalization and medical costs are borne by a third party such as Blue Cross, Blue Shield, insurance, retirement funds. The whole concept of hospital financing is changed. Wealthy persons used to provide for the indigent by endowments, but now that class of people is an entirely different

worry. There are now no philanthropists who donate to charity hospitals. There are few charity hospitals. The cost of the indigent goes, as it should, to governmental agencies. But these agencies do not pay the full charge of the hospital, only a proportion, so the prepayment funds and the paying patients must of necessity carry the extra charge.

Other loads on the financial setup of the hospitals are the training courses for interns, house physicians, nurses and technicians. All these expenses are now the responsibility of the teaching hospitals, and therefore cause additional charges to the paying or prepaid patient. That is all to the good for teaching purposes, but the question is being asked, "Is that a proper charge against the patient; against Blue Cross?"

These remarks will point to some of the problems to be solved. Much thought is now being given to these and other measures.

Michigan Hospital Service, with the co-operation and guidance of the Michigan State Medical Society and the assistance of Michigan Medical Service, has a joint committee studying hospital admissions over a period of time, looking for over-utilization and abuse. Over 7,000 admissions have been reviewed. It is hoped this may reach at least 14,000 before the September meeting, so a comprehensive report may be made.

Constant sympathetic co-operation on the part of the users of medical and hospital service is a basic need. The idea must be recognized that these plans are our own creatures and possessions —they are not alien, but self-made and self-administered. They must not fail, else the penalty on the Doctor of Medicine and on his practice is too great.

AIR POLLUTION

(Continued from Page 630)

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DIAGNOSIS OF OCCUPATIONAL DISEASES

(Continued from Page 634)

Records

Medical records must contain the accurate details of the occupational history, physical findings, and the source from which the environmental information was obtained.

The medical record, to be of service to the patient, the medical profession, and other interested parties, must contain facts to the end that the medical opinion and diagnosis stem from recorded information which is consistent with acceptable medical facts. In all disease, but especially in occupational disability, is this true, wherein medical testimony is vital to properly establish legal responsibility.

Summary

A symptomatic approach to occupational disease diagnosis follows lines common to all diagnosis. Particular emphasis and inquiry is directed to specific agents and conditions known to produce disabilities, and to the search for such materials or environmental circumstances where occupational disease is presently suspect. Differential diagnosis is everywhere to be considered. In stepwise fashion, the following inquiries and procedures merit consideration:

1. Accurate job history.
2. Complete and exact information regarding all materials and the conditions of alleged exposure.
3. Factual medical evidence of structural and functional impairment.
4. Supportive clinical and analytical laboratory data.
5. Final medical opinion to rest on the combined clinical and laboratory picture as supported by recorded facts.

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A BLUE SHIELD REPORT to the DOCTORS OF MICHIGAN

WASHINGTON BLVD. BUILDING . . . DETROIT 26, MICHIGAN

MICHIGAN MEDICAL SERVICE

THE DOCTORS' BLUE SHIELD PLAN

TO THE DOCTORS OF MICHIGAN:

On behalf of the Michigan Medical Service Board of Directors, I would like to take this opportunity to thank the Michigan State Medical Society for again permitting Blue Shield to report to the Doctors of Michigan through the pages of The Journal. It is most gratifying to have this opportunity each year, and especially pleasing this year when our section of The Journal deals with a report of a most successful year.

The expansion of Blue Shield coverage, its past record, its present stature, are all fruits of the labor of each Doctor in the state. I share with each of you a deep sense of pride.

For the past decade, we have had the opportunity of watching the Blue Shield Plan in Michigan take its place among other fields of endeavor as leaders.

On the pages which follow, Michigan's Blue Shield Plan presents the facts which support the premise that YOUR Plan is the leader in the nation. There are but two basic conclusions I would point out to each of you:

First, Blue Shield in Michigan is no longer a nebulous organization, but rather it is the leading Plan of its kind in the world.

And second, the strength and future of the Plan rests solely with each of you. The strength rests in your support and cooperation which you have enthusiastically demonstrated. The future of the Plan rests with the conscientious doctor who carefully evaluates his patient's need for care which becomes the responsibility of the Plan.

The basic philosophy of Blue Shield has not changed. The Plan began as a means for individuals to prepay necessary medical and surgical care. To deviate from this premise is to invite disaster.

The people of Michigan have placed their trust in your guidance, your cooperation and your professional ability.

R. L. Novy

President, Michigan Medical Service

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The Report

FINANCIAL STATUS

In accordance with the Act of the Legislature under which the Michigan Medical Service operates, the Department of Insurance examined the books and records of the company as of December 31, 1952. The following Balance Sheet and Income Statement reflect the results of this examination.

Assets as of December 31, 1952, totaled $10,881,584.62 or an increase for the year of $1,333,857.84. Of these assets, 64.19 per cent were invested in United States Government Securities and 5.87 in real estate purchased as a future home office of Blue Cross-Blue Shield.

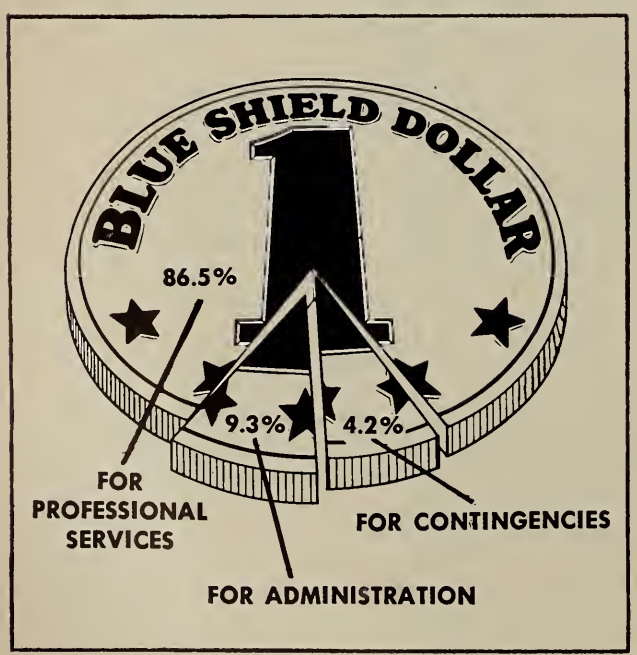
Liabilities amounted to $5,399,355.77.

The largest single liability is for professional services rendered to subscribers, amounting to $3,713,639.00. This includes an estimated liability for services rendered but not as yet reported, which is thought to be ample.

The Reserve for Contingencies as of December 31, 1952, increased by the net income for the year $1,217,399.23, totaled $5,482,228.85, which is available for any unforeseen events which may occur. This amounts to $1.99 for each subscriber as compared with $1.79 on December 31, 1951. This $5,482,228.85 in the Reserve for Contingencies amounts to approximately three times the average monthly monetary value of the services rendered in the year ending December 31, 1952.

Income from Subscription fees during the year amounted to $24,633,715.85 compared with $21,145,603.20 for the year 1951.

Professional services to subscribers for the year amounted to $21,304,641.72 as compared with $17,531,479.72 for 1951.



Eliminating the income from the Veterans Administration since inception of the program in 1946, $7,415,258.99, which covers payments for services of $6,841,106.61 and administration expense of $574,152.38, a gain and loss statement from March 1, 1940, to December 31, 1952, is as follows:

Subscription Fees Earned	$109,208,563.57	100.00%
Services Rendered to Subscribers	92,420,490.33	84.63%
**Administration Expense	11,844,669.83	10.84%
Income from Operations	4,943,403.41	4.53%
Investment Income and Miscellaneous	538,825.44	.49%
Net Income	$ 5,482,228.85	5.02%
**Administration Expense		
Michigan Medical Service Expense	$ 4,661,309.01	4.27%
Michigan Hospital Service Expense for Solicitation, Collection and Record Keeping	7,183,360.82	6.57%
	$ 11,844,669.83	10.84%

The following tabulation shows the Assets, Liabilities, and Reserve or Deficit as at each date shown from the $10,000.00 advanced by the Michigan State Medical Society to start the organization to its $10,881,584.62 in assets as of December 31, 1952.

	Assets	*Liabilities*	*Reserve*
Feb. 1, 1940	$ 10,000	$ 00	$ 10,000
Dec. 31, 1940	144,604	99,806	44,798
Dec. 31, 1941	320,192	422,546	102,354*
Dec. 31, 1942	263,105	702,833	439,728*
Dec. 31, 1943	427,916	564,159	136,243*
Dec. 31, 1944	1,197,372	885,810	311,562
Dec. 31, 1945	1,656,821	961,646	695,175
Dec. 31, 1946	2,300,431	1,049,100	1,251,331
Dec. 31, 1947	2,896,797	1,387,740	1,509,057
Dec. 31, 1948	3,823,946	1,884,878	1,939,068
Dec. 31, 1949	3,657,773	2,410,749	1,247,024
Dec. 31, 1950	6,479,826	3,919,706	2,560,120
Dec. 31, 1951	9,547,727	5,282,897	4,264,830
Dec. 31, 1952	10,881,584	5,399,355	5,482,229

*Deficits

BALANCE SHEET

As at December 31, 1952

Assets

U. S. Government Securities	$ 6,984,810.64
Cash in Banks and on Hand	2,483,487.19
Subscription Fees Receivable	76,314.96
Interest and Rents Accrued	65,954.77
Accounts Receivable, Veterans Administration	111,133.30
Home Office Real Estate	638,375.53
Other Admissible Assets	521,508.23
	$10,881,584.62

Liabilities

Reserves for:		
Payments for Services Rendered		$ 3,713,639.00
Subscription Fees Unearned		1,596,442.47
Taxes, Expenses, and Sundry Accounts Payable		89,274.30
Total Liabilities		$ 5,399,355.77
Reserve for Contingencies:		
Balance, December 31, 1951	$4,264,829.62	
Net Income for the Year	1,217,399.23	
		5,482,228.85
		$10,881,584.62

STATEMENT OF INCOME
For the Year Ended December 31, 1952

Income Earned:		
Subscription Fees		$24,633,715.85
Veterans Administration and Other Fees		1,054,317.52
		$25,688,033.37
Costs and Expenses:		
Services Rendered to Subscribers	$21,304,641.72	
Services Rendered to Veterans	974,143.00	
Salaries	621,629.24	
Services of Michigan Hospital Service	1,382,938.75	
Other	361,616.03	
Total Costs and Expenses		24,644,968.74
Income from Operations		1,043,064.63
Interest and Rents Earned, Net		174,334.60
Net Income Transferred to Reserve for Contingencies		$ 1,217,399.23

PAID FOR PROFESSIONAL SERVICES

	Med.-Surg. Plans	*Veterans Plan*	*All Plans*
1940	$ 172,115.00		$ 172,115.00
1941	789,254.88		789,254.88
1942	2,208,623.42		2,208,623.42
1943	2,876,547.90		2,876,547.90
1944	3,437,265.50		3,437,265.50
1945	4,155,422.68		4,155,422.68
1946	4,720,963.05	$ 385,316.85	5,106,279.90
1947	5,423,613.66	1,130,976.03	6,554,589.69
1948	6,102,443.37	1,023,468.87	7,125,912.24
1949	9,604,199.33	1,172,794.28	10,776,993.61
1950	11,411,160.10	1,146,261.80	12,557,421.90
1951	16,365,701.34	1,008,145.78	17,373,847.12
1952	21,439,541.10	974,143.00	22,413,684.10
	$88,706,851.33	$6,841,106.61	$95,547,957.94

MEDICAL CARE PROTECTION GAINS

As of December 31, 1952, enrollment in the Blue Shield Plan was 2,748,923 subscribers. We continue to grow but the most significant fact in our growth is the spectacular enrollment under our Medical Care Plan.

Just four and a half years ago, on June 30, 1948, there were only 27,442 persons covered for both medical and surgical benefits. Today, we have 1,385,790 persons covered for medical and surgical benefits—an increase in excess of 1,350,000 persons.

The Blue Shield Package Plan of Medical and Surgical Care provides not only the same surgical plan, but in addition provides for payments to the doctor for medical care he renders to patients in the hospital for illness not involving surgery. Such illnesses might be poliomyelitis, pneumonia, diabetes, heart ailments, which according to recent statistics account for nearly one-third of all hospital admissions at the present time.

A Medical Care Plan, which included home and office calls, was offered in the earlier days of the program but proved actuarially unsound and was withdrawn in 1942. In 1945, our present Medical Care Certificate was again offered to the public, but the benefits were restricted to medical care in the hospital only.

Since our prior experience had been unfavorable, enrollment requirements for the Medical Care Plan were set very high and, consequently, the enrollment progress was slow. During the years 1948, 1949 and 1950, much study and research were carried on until we felt the benefits under the in-hospital Medical Care Plan could be maintained at the established subscription rates. It was at this time Michigan Medical Service found it necessary to increase the subscription rates of the Surgical Only Plan because of a rapidly rising rate of utilization. A ruling was made that our new group enrollment requirements for the Medical Care Program would be liberalized and that those groups who were presently enrolled under the Surgical Only Plan would be given the opportunity to transfer their coverage to the Medical Care Plan at the established rates rather than to continue under their Surgical Only Plan and be forced to pay the increased subscription rates announced at that time.

A review of the accompanying chart will show the effects of that decision as of June 30, 1952. We not only enrolled a greater number of subscribers under the Medical Care Plan than heretofore, but thousands of subscribers who were then enrolled for Surgical Only protection transferred their coverage to the Medical Care Plan. This is clearly indicated by the loss of subscribers under the Surgical Only Certificate beginning in the year 1950, whereas enrollment in the Plan as a whole continued to rise.

Enrollment in Blue Shield, with the exception of our non-group enrollment and a few other exceptions (Federal employes, professional groups, et cetera), is permitted only to groups of five or more persons having a common employer and where payroll deductions for the monthly subscription rates can be arranged. As of December 31, 1952, we have 12,863 such groups covering 2,381,047 persons.

In February, 1951, the new $5,000 Income Limit Certificates were offered to the public for the first time. Since that date, we have enrolled 1,639 groups covering 148,986 persons under these new $5,000 Income Limit Certificates. Some of these groups are new to Blue Shield. Others are groups that were formerly enrolled under the $2,500 Income Limit Certificate, but desired the higher benefits provided under the new $5,000 Income Limit Certificate.

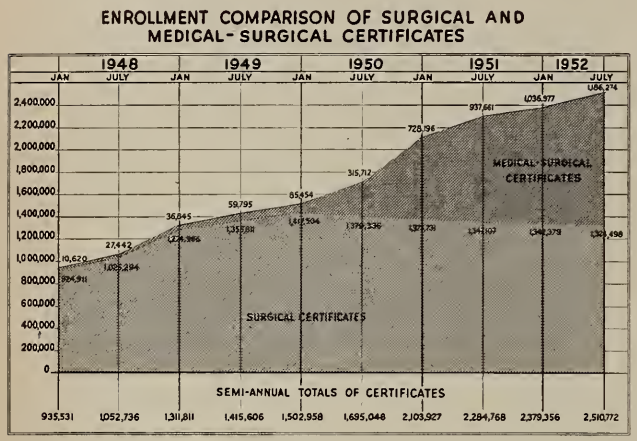


Chart 1.

This new certificate continues to become increasingly popular with both large and small groups. Groups enrolled under this type of certificate range from a large industrial firm with thousands of employes to small manufacturing plants and trade groups with as low as five to ten employes. All classes of businesses seem to be interested in this type of contract, since we have enrolled such types of business as banking and brokerage, labor organizations, public utilities, hotels, restaurants, retail organizations of all kinds, as well as hundreds of manufacturing plants.

Our requirements for enrollment of new groups, regardless of the type of benefits applied for, may be of interest. We require 75 per cent of the employes to apply for coverage before the groups are accepted for enrollment in Blue Shield. This applies to those groups having 15 or more employes. Where the employment is less than fifteen, the requirements are as follows:

Groups of 5 employes	All must enroll
6 to 11 employes	All but 1
12 employes	All but 2
13 or 14 employes	All but 3

Periodically, all groups are resolicited and employes who had not previously enrolled, are given the opportunity to apply for coverage. Here again, certain requirements must be met before applications are approved.

WORLD LEADERS

Chart 2 reflects our over-all enrollment without regard to a breakdown of any kind. It simply tells the story that as of December 31, 1952, we have 2,748,923 persons enrolled in the Michigan Blue Shield Plan. It is estimated the population of the State of Michigan is approximately 6,435,000 persons. Consequently, over 43 per cent of the residents of this state are now enrolled in your Plan.

We have especially emphasized the year 1948, at which time your program became the first Blue Shield Plan in the world to enroll 1,000,000 persons. For this outstanding achievement, the Michigan Plan was awarded a plaque by the Blue Shield Medical Care Plans on October 27, 1948, at the Annual Conference of the Blue Shield Plans.

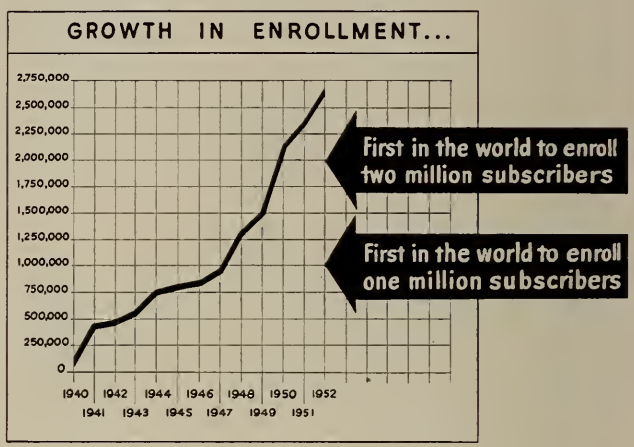


Chart 2.

Your Plan continued to have a steady growth and once again Michigan led the world by enrolling its 2,000,000th subscriber in the year 1950. Again a plaque for outstanding achievement was awarded Michigan Medical Service at Detroit on January 21, 1951.

During the last calendar year, 369,567 persons were added to our enrollment. The enrollment representatives continue to conduct an extensive campaign to convince the buying public of the necessity for our voluntary non-profit type of prepaid Medical Care Program. Their success is evidenced by the fact that today 95 per cent of the people in Michigan who are protected by Blue Cross prepayment Hospital Benefits are also protected by either Blue Shield Surgical Only coverage or Medical-Surgical coverage.

We feel the public has approved the principles of Blue Shield as shown by the growth of the Plan through the years.

It is our responsibility to the sponsors, the Doctors of Michigan, to offer the residents of

Michigan the best possible prepaid Medical Care offering best possible benefits, at the lowest possible subscription charges, in keeping with a sound financial condition.

EVERYONE HAS AN OPPORTUNITY TO ENROLL

Everyone in the State of Michigan has now had two opportunities to enroll in Blue Cross-Blue Shield through our Non-Group enrollment.

The availability of Blue Cross-Blue Shield to the individual was made possible by the creation in 1945 of the Community Relations Department. Over the years, numerous methods have been used to make our services available to those people who, for various reasons, may not obtain Blue Cross-Blue Shield through their places of employment. The latest method used was a state-wide campaign. By the use of this technique, which required meetings with doctors through their societies, with medical auxiliaries, hospital auxiliaries, the use of considerable newspaper advertising, radio and television, we were able to reach the entire state population in one concerted effort known as Blue Cross-Blue Shield Statewide Non-Group Campaign.

The need for presenting the Blue Cross-Blue Shield story to the general population has long been recognized, and numerous attempts have been made to do the job properly. Perhaps one of the best methods was developed this last year through the adoption of a series of slides in combination with a running commentary by a representative of the Non-Group Department. These slides were shown at more than thirty meetings which were attended by well over 1,500 people. Attendance at these meetings consisted of members of luncheon clubs, women's auxiliaries, and labor groups. The response as a result of the meetings was most gratifying.

The 1952 campaign was planned to last approximately three months, and was handled in two phases: (1) educational, and (2) enrollment. The educational part of the campaign lasted for a period of approximately one month and was followed immediately by activity through the various branch offices.

The non-group campaign of 1952 again resulted in our obtaining a large number of new groups in addition to the thousands of individual applications for Blue Cross-Blue Shield.

It is most interesting to note that during our non-group campaign, many inquiries are received by the Non-Group Department from employers inquiring about the procedure and requirements for enrolling in Blue Cross-Blue Shield.

Evidently, these inquiries are prompted by an employe approaching his employer concerning such enrollment as a result of the publicity campaign or no doubt in some instances by the interest of the employer himself.

All such inquiries are immediately referred to the enrollment representative who is in charge of the particular area from which the inquiry originated. The inquiries are followed up, for the most part at least, by personal calls and as a result of this procedure a great many subscribers are enrolled on a group basis.

As of December 31, 1952, there were 44,496 contracts in force under the Non-Group Plan, representing 95,491 subscribers.

This Department is already laying the ground work for the 1953 campaign, and will be most grateful for the continued help of the members of the Michigan State Medical Society.

PROTECTION FOR THE RURAL FAMILY

The report on rural enrollment includes both the Farm Bureau and Grange organizations. These two organizations are best prepared to co-operate with us on enrollment problems because they have strong state-wide personnel as well as district representatives and county organizations.

The official unit which actually enrolls its members is the Community Discussion Group of the Farm Bureau and the Subordinate Grange of the Grange organization. Enrollment is based on the actual membership of each such group as certified to us by an officer of each group. Our regular group percentage applies to these groups which have ten to twenty-four members on a family unit basis, but only 60 per cent is required of groups having twenty-five or more members. Practically all rural groups, regardless of membership, now enroll over 75 per cent during their initial enrollment.

New enrollment in the year ending December 31 increased sharply over the previous year. The totals on billings as of December 31 for both Farm Bureau and Grange groups was over 34,000 contracts, representing 100,624 members. This was an increase of approximately 20 per cent. Over 90 per cent of the total enrollment is for the benefits of both Michigan Hospital Service and Michigan Medical Service.

The largest part of the rural enrollment is within the Farm Bureau organization, which accounts for about 31,000 of the total number of contracts. This represents about 60 per cent of their total statewide membership and about 75 per cent of the members eligible through discussion groups. The percentage enrollment of eligible members of subordinate granges is approximately 75 per cent, but the percentage of total Grange memberships in the state is only about 30 per cent. Steps have been taken to improve the organization of enrollment in the Grange.

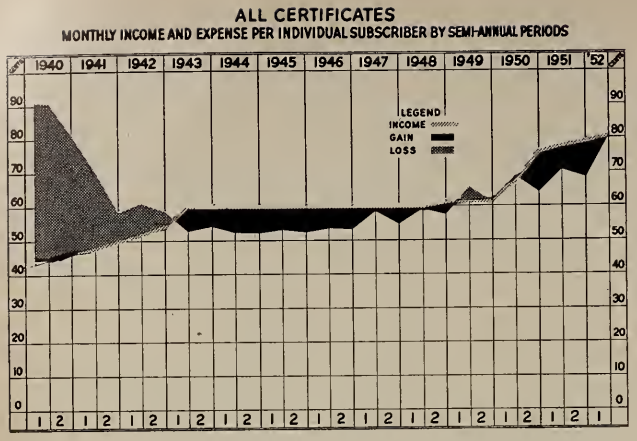


Chart 3.

THE VETERANS HOME TOWN CARE PROGRAM

The Veterans Home Town Care Program was developed shortly after the end of World War II. At that time the Veterans Administration was not equipped to provide the necessary medical services to the large number of veterans with rated service-connected disabilities.

After many preliminary discussions and planning sessions, Michigan Medical Service, acting as intermediary for the Michigan State Medical Society, entered into contract with the Veterans Administration to provide medical care to eligible veterans, giving the veteran his own choice of physician.

Since the inception of this program, rapid strides were made to produce efficient methods enabling the veteran to get prompt care and attention. Much of the paper work was reduced, and payments to physicians were made promptly. At the present time between 7,000 and 8,000 veterans are seen each month by their own doctors.

The method employed enabling Doctors of Medicine to receive reimbursement for their services is quite simple. They need only to return the combination authorization report form at the end of the month or upon completion of a series of treatments, whichever occurs first, on which they record the number of visits made (by date) and the type of treatments provided. This is the only form of statement required from the doctors, which of course eliminates the necessity of his regular monthly statements. As a result of the returned completed reports of medical services rendered to December 31, 1952, payments totaling $6,841,106.61 have been made with a monthly high of $121,312.25 being made during the month of March, 1950.

INCOME AND EXPENSE VARIATION

In March, 1940, Michigan Medical Service issued its first certificates. Two types of certificates were issued at that time—one of which included home and office care. Subscription rates for these certificates were based on meager actuarial data. It was soon found that the rate for full coverage in the home and office as well as the hospital was inadequate and these certificates were discontinued in 1942. It was felt that subscribers would be unable to pay the necessary high rate.

Subscription rates on the $2,500 Income Surgical Contract were increased in 1941, 1942, and again on March 1, 1950. On May 1, 1945, the $2,500 Medical-Surgical In Hospital certificate was first issued to be followed on February 1, 1951, with the $5,000 Income Surgical contracts and Medical-Surgical contracts.

The higher income per individual for the year 1950 shown in Chart 3 is primarily due to the increase in rates on the $2,500 Surgical certificate and gerater enrollment in the $2,500 Medical-Surgical certificate. The still greater increase to 79 cents in the last half of 1951 and 80 cents in 1952 reflects the trend to enroll under the $5,000 certificates and still greater enrollment under the $2,500 Income Medical-Surgical certificate in preference to the $2,500 Surgical certificate.

Costs, including Service Fees and Administration Expense per individual, were extremely high in the early years when enrollment was small but was increasing rapidly. This cost declined during the war years and we believe reflects the tendency of busy people to defer needed medical attention. During this period only the $2,500 Surgical Certificate was issued.

With the introduction of the $5,000 Income Certificate with higher fees for professional service, costs have gone still higher in the latter part of 1951 and the first part of 1952.

MORE MEMBERS ARE USING BLUE SHIELD PROTECTION

From 1946 on, there has been a steady increase in the Incidence Rate coupled with a reduction in the average cost of each service. This we believe is due to a liberalization of the terms of this certificate to cover a specific list of office and outpatient surgery as well as accidental injuries; a greater use of x-rays; and an increase in the number of anesthetics rendered by Doctors of Medicine.

A recapitulation showing all services per 1,000 subscribers per year compared with the incidence rate for x-rays and anesthesia is shown in Table I.

The listing in Table II shows the growth of your Plan in number of people covered. The 1940-41 enrollment in the full coverage certificate and en-

TABLE I

Year	*All-Services*	*X-Ray*	*Anesthesia*
1943	137.64	27.53	9.88
1944	133.08	27.40	12.11
1945	140.40	31.11	13.36
1946	132.96	34.28	13.76
1947	154.56	39.37	16.09
1948	169.44	47.48	17.56
1949	194.38	58.08	17.93
1950	208.66	59.14	18.31
1951	226.42	63.92	18.34

TABLE II

Jan. 1, 1945 to Jan. 1, 1953	$2,500 *Income Certificate*		$5,000 *Income Certificate*		*All Certificates*
	Surg.	*Med.-Surg.*	*Surg.*	*Med.-Surg.*	
1945	717,420				717,420
1946	855,540	2,695			858,235
1947	836,271	4,630			840,901
1948	924,911	10,620			935,531
1949	1,274,966	36,845			1,311,811
1950	1,417,504	85,454			1,502,958
1951	1,375,731	728,196			2,103,927
1952	1,306,758	995,475	35,621	41,502	2,379,356
1953	1.292.915	1,226.919	70,218	158,871	2,748,923

rollment in one large group where only the employed individual was protected, is not included.

With changes in medical practice, office surgery liberalization, and an increase in the number of certificates with Hospital-Medical Care, the number of services has increased more rapidly than the number of people covered. As an example: In 1950, there were 16.4 services per month under the Surgical Certificate per 1,000 people covered as compared with 20.78 services under the Medical-Surgical Certificate.

Table II gives the enrollment on the date indicated by type of certificate.

BENEFITS REACH RECORD HIGH

Observing Charts 4 and 5, it will be noted that the number of services rendered and the amounts paid to doctors for such services are grouped in substantially the same sequence as those in the

NUMBER OF SURGICAL SERVICES RENDERED
JANUARY 1, 1943 TO JUNE 30,1952

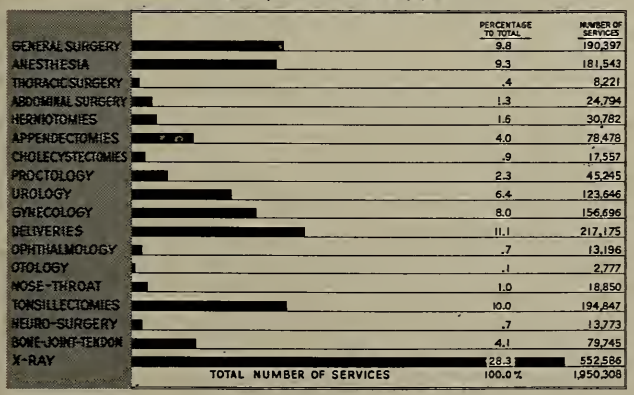


Chart 4.

PAID TO DOCTORS FOR SURGICAL SERVICES RENDERED
JANUARY 1,1943 TO JUNE 30,1952

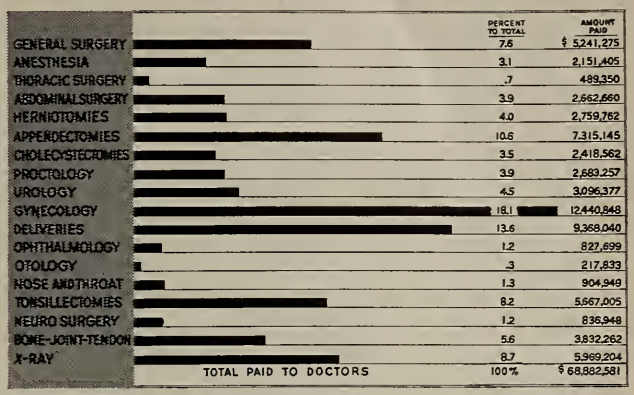


Chart 5.

Schedule of Benefits published by Michigan Medical Service.

Appendectomies, tonsillectomies, and services connected with gynecology (except deliveries) account for only 22 per cent of the total number of procedures performed, yet account for 36.9 per cent of all payments made.

For the delivery of 52,932 babies during the last fiscal year, your Plan paid to doctors $2,414,630.00.

MEDICAL CARE PLAN

We have previously emphasized the rapid growth in enrollment under our Medical In-Hospital Care Program. We have also noted its effect on our utilization rate and on our income.

Since this program actually did not get into full swing until approximately the middle of the year 1950, the exposure and utilization was not great enough to prepare statistical data that would be of any significance. For the year 1951, however, we do have adequate information on which to report but it cannot be shown in graph or chart form because the material cannot be related to prior years. In this section, therefore, we shall confine our report to simply a statement concerning cost and utilization and compare these items under the full Medical Care Plan to those under the Surgical-Only Certificate. Table III is prepared for that purpose.

TABLE III. SURGICAL SERVICES

Surgical-Only Contract	
Services per 1,000 members per month	16.87
Average cost per service	$ 32.52
Cost per 1,000 members per month	549.73
Surgical Services only under Medical-Surgical Certificates	
Services per 1,000 members per month	18.19
Average cost per service	$ 32.67
Cost per 1,000 members per month	594.31

During the Fiscal Year ending June 30, 1952, your Plan paid to Doctors for services rendered for Medical Care (Non-Surgical) the amount of $1,751,294.45. This payment represents 43,748 services involving 440,452 days of care. The Av-

erage Length of Stay in the hospital for a Medical Care admission is 10.08 days.

Table IV concerns Medical Care (Non-Surgical) only.

TABLE IV. MEDICAL CARE

Number of services per 1,000 members per month	3.33
Average cost per service	$ 40.05
Cost per 1,000 members per month	133.35
Days of Care per 1,000 members per month	33.95
Average cost per day	$ 3.93
Average length of stay	10.04 days

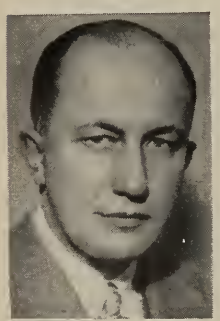
Payments to Doctors for services rendered under the Medical Care Plan as outlined in our Schedule of Benefits as shown in Table V.

TABLE V

	$2,500 Income Contract Schedule	*$5,000 Income Contract Schedule*
First day hospitalization	$10.00	$12.50
Second, third and fourth days	4.00	5.00
Subsequent Days	3.00	4.00

Medical services rendered by the Doctor in charge of the case (not related to Surgical or Maternity Service) is limited to a total of 120 days of service between the effective date of the certificate and the first anniversary thereof or during any succeeding twelve-month period, excepting, however, Medical Services for tuberculosis or nervous or mental conditions, which is limited to a total of thirty days of such service in each certificate year.

FACTS ABOUT OUR COMPANION BLUE CROSS PLAN



K. Babcock, M.D.
President, Michigan
Hospital Service

Since February 23, 1940, Michigan Medical Service and Michigan Hospital Service have served the Michigan public as companion service Plans. That date marks the signing of a joint operations agreement which served to unify the efforts of these two organizations to reach the public with their services. Through this agreement, Michigan Hospital Service has assumed the following duties in behalf of both organizations:

1. Advertising and promotional activities to reach and educate all segments of the public to the services offered through literature, the press, radio, and other similar media.

2. Performing all enrollment activities, including presentation of the plans to the employers and employes, as well as professional groups and all other eligible groups.

3. Arranging delivery of contracts and identification cards to subscribers.

4. Servicing and maintenance of contracts through sufficient personnel and branch facilities to cover the State of Michigan.

5. Establishing and maintaining records and files pertaining to every person entitled to service.

6. Handling billings to and collections from subscribers and subscriber groups.

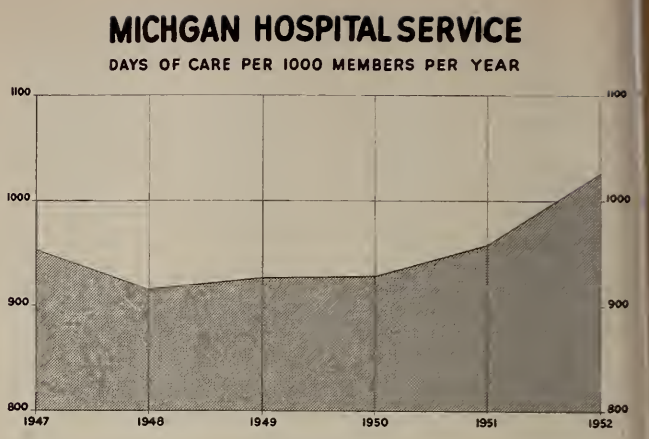


Chart 6.

As Michigan Medical Service offers doctors services through prepayment, so Michigan Hospital Service offers services of 201 non-profit general hospitals throughout Michigan. Through its service contracts with participating hospitals, Michigan Hospital Service offers group coverage up to 120 days and individual coverage up to thirty days per hospital confinement including the following services:

1. Full ward or semi-private room service depending upon the coverage selected by the subscriber.

2. Unlimited extra hospital services with the exception of blood and appliances.

The Michigan Hospital Service contract covers the greatest number of subscribers with the broadest benefits of any Blue Cross or competitive plan. Coupled with the Michigan Medical Service contracts which are also among the broadest available, Michigan offers the greatest combination of coverage to the largest number of people.

In testimony of the efforts and relationship of our companion plans, we can point with pride to the fact that according to available figures Michigan enjoys the highest ratio of medical-hospital contracts of any of the Blue Cross-Blue Shield Plans.

MHS Membership	*MMS Membership*	*Ratio*
2,898,954	2,748,923	95%

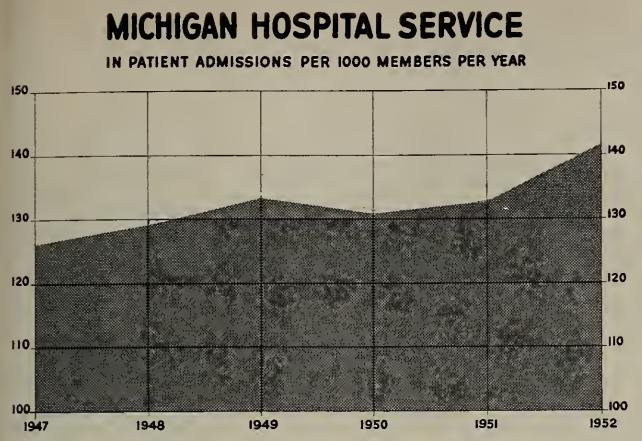


Chart 7.

HOSPITAL DAY UTILIZATION AND INCIDENCE OF ADMISSION

Utilization of bed days per 1,000 subscribers per year has risen sharply in the first six months of 1952 over the pattern of the prior five years. Figures for the years 1947-1951, inclusive, vary between 916 and 955. By sharp contrast, the figure for the first six months of 1952 is in the neighborhood of 1,060. By year end, the anticipated lower utilization for the last six months of the year may reduce the 1952 figure to 1,030 but that will still represent a 10 per cent increase over the prior five-year average.

The average length of stay per admission remains fairly stable.

The incidence of admissions had been the key item in increasing the bed day utilization. The incidence of admissions for the first six months of 1952 is 147. That may level to 142 by year end; but again is a substantial increase over the prior five-year average of 130.

The increase in utilization, as it affects economics of medical care, is further irritated by inflationary pressures which result in higher per diem operating costs in our hospitals.

There is very little we can do locally to offset the inflationary trend; however, the sharp and unexpected increase in incidence and utilization is worthy of serious study by the medical staffs of hospitals.

THE BLUE SHIELD PICTURE NATION-WIDE

Michigan Medical Service is one of seventy-eight Blue Shield Plans participating in the "Blue Shield Medical Care Plans," an association of voluntary, non-profit, medically sponsored, medical care pre-payment plans.

Michigan Medical Service was one of the nine charter members of the Blue Shield organizations in 1946 and has been active in its affairs since. Acceptance of a plan for membership in the national Association is based on conformity to standards of organization and operation set up by the Council on Medical Service of the American Medical Association, and some additional requirements set up by the Blue Shield Commission.

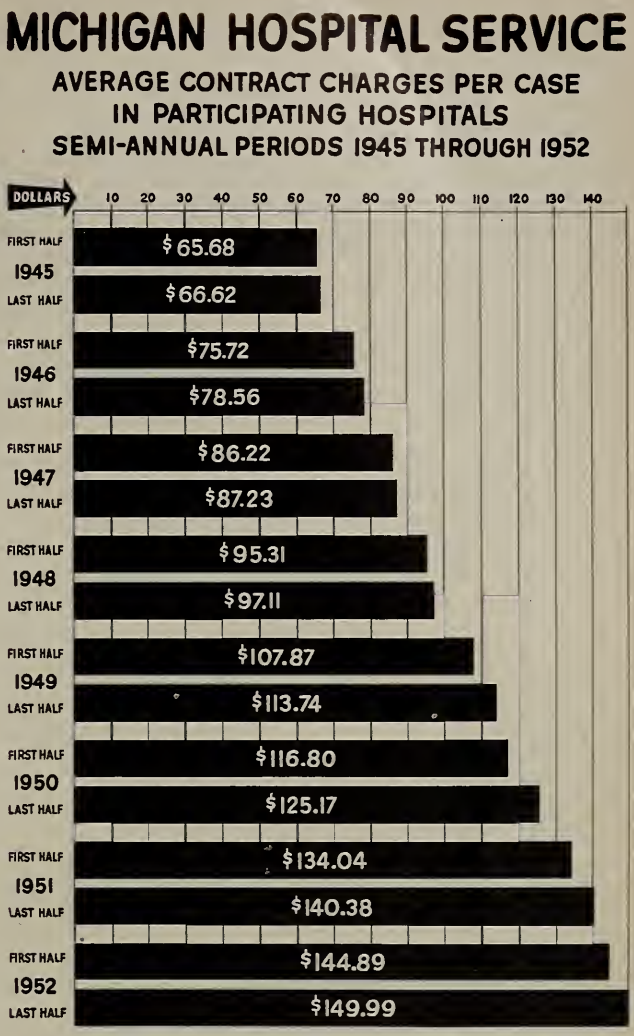


Chart 8.

Members of the Board of Directors and staff of Michigan Medical Service have contributed much to the work of the Blue Shield through its committees and its governing body, the Blue Shield Commission. Dr. R. L. Novy, President of Michigan Medical Service, is a member of the Blue Shield Commission, its Executive Committee, and also serves as its Vice Chairman. Jay Ketchum, Executive Vice President of Michigan Medical Service, is a member of the Commission, Executive Committee, and has served as its Treasurer.

The Blue Shield Commission is elected annually by the member Plans. Each of eleven geographical districts elects two Commissioners, one to represent the governing boards of Blue Shield Plans, and one to represent the Plan executives. In addition, there are eight Commissioners-at-Large—six of whom must be Doctors of Medicine. The

Commission for the year 1952-1953 consists of the following:

Norman A. Welch, M.D.
Boston, Mass.
Frederic E. Elliott, M.D.
New York, N. Y.
F. M. Miller, Jr., M.D.
Utica, N. Y.
J. A. Daugherty, M.D.
Harrisburg, Pa.
V. K. Hart, M.D.
Charlotte, N. C.
Leigh F. Robinson, M.D.
Fort Lauderdale, Fla.
W. Harry Howard, M.D.
Hammond, Ind.
Warren W. Furey, M.D.
Chicago, Ill.
Ira H. Lockwood, M.D.
Kansas City, Kans.
Richard R. Cranmer, M.D.
Minneapolis, Minn.
Donald Cass, M.D.
Los Angeles, Calif.

Russell S. Spaulding
Concord, N. H.
John F. McCormack
New York, N. Y.
Irving P. Borsher, M.D.
Newark, N. J.
Harold V. Maybee
Wilmington, Del.
J. H. Matthewson
Huntington, W. Va.
H. F. Singleton
Birmingham, Ala.
Charles H. Coghlan
Columbus, Ohio
Kenneth K. Clark
Rockford, Ill.
Sam J. Barham
Topeka, Kans.
James O. Kelley
Milwaukee, Wis.
Samuel English
Helena, Mont.

At Large

Paul R. Hawley, M.D.
Chicago, Ill.
Charles Gordon Heyd, M.D.
New York, N. Y.
Jay C. Ketchum
Detroit, Mich.
Robert L. Novy, M.D.
Detroit, Mich.

A. J. Offerman, M.D.
Omaha, Nebr.
L. Howard Schriver, M.D.
Cincinnati, Ohio
Carlton E. Wertz, M.D.
Buffalo, N. Y.

Blue Shield membership nationally has grown at the rate of 14,385 persons every working day during 1952, a total of 3,629,363. Since organization of the national Association the growth by years is shown by the following:

December 31	*Total Members*
1946	1,826,719
1947	5,791,175
1948	8,911,225
1949	12,260,045
1950	16,629,596
1951	21,130,996
1952	24,770,359

In the United States, Puerto Rico and Hawaii, the Blue Shield Plans have enrolled 16.55 per cent of the population in the areas served.

The Blue Shield Plans in eleven states serve in excess of 20 per cent of the population:

Area	*Per Cent*
Delaware	59.45
District of Columbia	45.17
Michigan	43.14
Connecticut	30.35
Massachusetts	29.98
New Hampshire-Vermont	27.45
New York	25.55
Colorado	25.32
Ohio	22.72
Indiana	22.16
New Jersey	20.63

Payments to doctors for care of Blue Shield members has increased from $55,161,457 in 1948 to $208,514,177 during 1952:

1948	$ 55,161,457
1949	79,218,673
1950	115,906,544
1951	165,055,227
1952	208,514,177

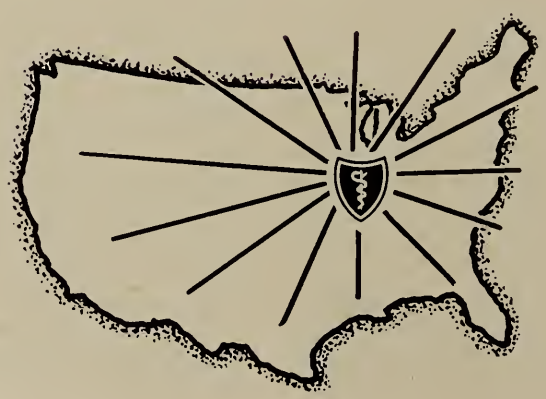
SUMMARY

Doctors of Michigan, you can be proud of the achievements and progress your Blue Shield Plan has shown in the past.

Thousands of people in Michigan are enrolling each month for the protection you are making possible for them. The record speaks for itself. Blue Shield in Michigan . . . in reality each doctor in the state . . . is blazing the trail for other parts of the nation to follow.

But let none of us misinterpret the situation. There is much to be done, more experimenting to do, and much yet to learn. The aged, the indigent and other segments of the population must be approached from a realistic point of view. More than ever before in our history as a profession will we be called upon to offer solutions, and not theories, to situations facing us. Blue Shield will be called upon more and more to offer practical answers to problems facing us locally and nationally. We must be ready for those questions.

The record of Blue Shield in Michigan has been beyond reproach. With each doctor in the state recognizing his responsibilities to his profession *and* Blue Shield, the future can be a glorious one.



Medical Examiner System in Michigan a Reality



LeMoyne Snyder, M.D.
"Father" of medical examiner system

Michigan took progressive steps through its Legislature with the adoption of a bill to do away with the outmoded coroner system and replace it with a medical examiner system.

The House of Representatives passed Senate Bill 1293 on May 14 upon recommendation of the Michigan State Medical Society. While the bill passed in the 1953 Legislature is not the final answer to a complete medical examiner system, it is the beginning. As passed, the measure allows the Board of Supervisors in individual counties of the state to determine whether the system is to be adopted in their area. During its processing through the Legislature, the section setting up a state medical examiner to co-ordinate the activities of the county medical examiners was deleted. Political observers in Lansing believe, however, that in future years the Legislature will become aware of the necessity for the office of state medical examiner and see the wisdom of inserting this office into the law.

The medical examiner system has been the personal project of LeMoyne Snyder, M.D., Lansing, noted medico-legal expert, for the past seventeen years. With the exception of the years of World War II, a medical examiner bill has been introduced in all regular sessions of the Legislature since 1936, each drafted and improved by Dr. Snyder. While waiting for Michigan to act, he had the satisfaction of witnessing his bill drafted into law by several other states!

Dr. Snyder was among many individuals and groups who were interested in the progressive measure. He was instrumental in getting a concert of opinion among the several organizations so that opposition previously encountered, due to misunderstandings, was obviated this year. Assisting in the drafting of the 1953 bill were such organizations as the Michigan Pathological Society, the State Bar of Michigan, the Michigan Association of Police Chiefs, the Michigan Prosecuting Attorneys Association, the Michigan Municipal League, and the Michigan State Medical Society.

In previous years, the measure had never come out of legislative committee. While the bill, as introduced in 1953, was quite similar to those introduced since 1936, the suggestions made by representatives of the sponsoring organizations greatly assisted in the final success of the legislation.

For proper criminal investigation, it has been proven there is a definite need for a medical examiner system in Michigan to replace the antiquated and ineffective coroner system. The state has long been below national averages for the number of homicides and suicides reported in a year's period. It has correspondingly been above the national average in deaths from natural causes. Obviously, many murders have gone undetected in Michigan merely because the coroner called to the scene of the unexpected death was not able to determine the exact cause of death. Far too often deaths of a questionable nature have been attributed to "heart attack."

Although medical examiners may not take office until January, 1954, the Michigan State Medical Society and component county medical societies should recognize the opportunities and the planning and preparations for making the medical examiner system a success. Since the bill is permissive, it is up to the county medical society to work toward its adoption in the county. That work should also include the acceptance of the responsibility of assisting the Board of Supervisors in finding adequately trained M.D.s to do the important job. It is anticipated that through the cooperation of groups interested in medical-legal matters, a special program of training for medical examiners can be developed. Each county medical society should implement and sponsor such a necessary program.

Law enforcement agencies join with the medical profession in predicting a future of progress in the investigation of fatal violence in this state.

TENTATIVE OUTLINE OF 1953 ASSEMBLY AND SECTION SPEAKERS

88TH ANNUAL SESSION, MICHIGAN STATE MEDICAL SOCIETY

Grand Rapids, September, 1953

Time	Wednesday September 23, 1953	Thursday September 24, 1953	Friday September 25, 1953
A.M. 8:30-9:00	Registration Exhibits Open	Registration Exhibits Open	Registration Exhibits Open
	FOUR SURGICAL SUBJECTS	GENERAL PRACTICE DAY	*Gastroenterology-Proctology (Beaumont Lecture)* J. A. Bargen, M.D. Rochester, Minn.
9:00-9:30	*Surgery* Walter G. Maddock, M.D. Chicago, Ill.	General Practice Chevalier L. Jackson, M.D. Philadelphia, Pa.	
9:30-10:00	*Surgery* W. D. Holden, M.D. Cleveland, Ohio	*Surgery (Industrial)* Michael L. Mason, M.D. Chicago, Ill.	*Dermatology* John G. Downing, M.D. Boston, Mass.
10:00-11:00	INTERMISSION TO VIEW EXHIBITS	INTERMISSION TO VIEW EXHIBITS	INTERMISSION TO VIEW EXHIBITS
11:00-11:30	*Surgery* Everett I. Evans, M.D. Richmond, Va.	*Otolaryngology* George E. Shambaugh, Jr., M.D. Chicago, Ill.	*Radiology* Leo G. Rigler, M.D. Minneapolis, Minn.
11:30-12:00 M.	*Urology* Frank Hinman, Jr., M.D. San Francisco, Calif.	*Medicine* Blair Holcomb, M.D. Portland, Oregon	*Public Health and Preventive Medicine* John Knutson, D.D.S. Washington, D. C.
P.M. 12:00-1:00	DISCUSSION CONFERENCE	DISCUSSION CONFERENCE	DISCUSSION CONFERENCE
2:00-2:30	*Pediatrics* Leo M. Taran, M.D. Long Island, N. Y.	*Obstetrics* To Be Announced	*Pathology* W. D. Forbus, M.D. Durham, North Carolina
2:30-3:00	*Ophthalmology* W. L. Benedict, M.D. Rochester, Minn.	*Gynecology* Arthur T. Hertig, M.D. Boston, Mass.	*Syphilology* H. J. Magnuson, M.D. Chapel Hill, N. C.
3:00-4:00	INTERMISSION TO VIEW EXHIBITS	INTERMISSION TO VIEW EXHIBITS	3:00-3:30 p.m. FINAL INTERMISSION TO VIEW EXHIBITS
4:00-4:30	*Obstetrics* To Be Announced	*Pediatrics* Victor A. Najjar, M.D. Baltimore, Md.	3:30-4:00 *Medicine* To Be Announced
4:30-5:00	*Nervous and Mental Diseases* O. Spurgeon English, M.D. Philadelphia, Pa.	*General Practice* Louis A. M. Krause, M.D. Baltimore, Maryland	4:00-4:30 *Medicine* Henry Welch, M.D. Washington, D. C.
5:00-6:00	FIVE SECTION MEETINGS	FOUR SECTION MEETINGS	4:30-5:00 *Surgery* Julian Johnson, M.D. Philadelphia, Pa.
	Ophthalmology W. L. Benedict, M.D. Rochester, Minn.	*Otolaryngology* Georoe E. Shambaugh, Jr., M.D. Chicago, Ill.	FIVE SECTION MEETINGS
	Nervous and Mental Diseases O. Spurgeon English, M.D. Philadelphia, Pa.	*General Practice* H. H. Sadler, M.D. Grosse Pointe, Mich.	*Radiology* Leo G. Rigler, M.D. Minneapolis, Minn.
	Pediatrics Leo M. Taran, M.D. Long Island, N. Y.	*Obstetrics-Gynecology* To Be Announced	*Dermatology-Syphilology* John G. Downing, M.D. Boston, Mass.
	Surgery W. D. Holden, M.D. Cleveland, Ohio	*Gastroenterology-Proctology* J. A. Bargen, M.D. Rochester, Minn.	*Public Health and Preventive Medicine* John Knutson, D.D.S. Washington, D. C.
	Urology Frank Hinman, Jr., M.D. San Francisco, Calif.		*Pathology* W. D. Forbus, M.D. Durham, North Carolina
	8:30 to 10:30 p.m. Officers' Night	10:00 p.m. to 1:00 a.m. State Society Night MSMS Entertainment	*Medicine* Henry Welch, M.D. Washington, D. C.
	Biddle Lecture		5:30 p.m. END OF ASSEMBLY

Michigan State Medical Society

The 88th Annual Session



William Bromme, M.D.
Detroit
Council Chairman



R. J. Hubbell, M.D.
Kalamazoo
President



R. H. Baker, M.D.
Pontiac
Speaker



L. Fernald Foster, M.D.
Bay City
Secretary



J. E. Livesay, M.D.
M.D.
Flint
Vice Speaker

OFFICIAL CALL

The Michigan State Medical Society will convene in Annual Session in Grand Rapids, Michigan, on September 21, 22, 23, 24, 25, 1953. The provisions of the Constitution and By-Laws and the Official Program will govern the deliberations.

R. J. Hubbell, M.D.
President

William Bromme, M.D.
Council Chairman

R. H. Baker, M.D.
Speaker

J. E. Livesay, M.D.
Vice Speaker

Attest:

L. Fernald Foster, M.D.
Secretary

TWO-DAY SESSION OF HOUSE OF DELEGATES

SEPTEMBER 21-22, 1953

The 1953 House of Delegates of the Michigan State Medical Society will hold a two-day session beginning Monday, September 21, at 10:00 a.m. The business of the House of Delegates will be transacted in the Ballroom of the Pantlind Hotel, Grand Rapids.

The House will meet also on Monday at 2:00 p.m. and at 8:00 p.m. and on Tuesday, September 22, at 9:30 a.m. and at 8:00 p.m.

The intervals between meetings of the House of Delegates have been spaced to permit the Reference Committees ample time to transact all business referred to them.

SEATING OF DELEGATES

"Any Delegate-Elect not present to be seated at the hour of call of the first meeting may be replaced by the accredited Alternate next on the list as certified by the Secretary of the component County Society involved."—MSMS By-Laws, Chapter 8, Section 6.

Michigan State Medical Society

The 88th Annual Session

PANTLIND HOTEL—CIVIC AUDITORIUM, GRAND RAPIDS, MICHIGAN

September 21, 22, 23, 24, 25, 1953

INFORMATION

- **GRAND RAPIDS WILL BE HOST TO MSMS IN SEPTEMBER, 1953**
- **MSMS HOUSE OF DELEGATES** convenes Monday, September 21, at 10:00 a.m., Ballroom, Pantlind Hotel. It will hold three meetings on Monday and two meetings on Tuesday, September 22.
- **THE PROGRAM OF THE ASSEMBLY** for the 88th Annual Session of the Michigan State Medical Society lists guest speakers from all parts of the United States. They are the usual stars in the medical world which always grace the podium at annual conventions of the Michigan State Medical Society; they insure a valuable concentrated continuation course in all phases of medicine and surgery for the busy practitioners of Michigan, neighboring states and the Province of Ontario, on September 23-24-25, 1953.
- **REGISTRATION**, Tuesday afternoon through Friday afternoon, September 22-25, Civic Auditorium. **Advance registration**—on Tuesday and early Wednesday morning—will save the Doctors' time. Present your State Medical Society or Canadian Medical Association membership card to expedite registration.

  NO REGISTRATION FEE FOR STATE MEDICAL SOCIETY AND CMA MEMBERS.

  Doctors of Medicine, who are *not* members of their state medical society or of the Canadian Medical Association, will be accorded the privileges of the MSMS Annual Session upon payment of a $25.00 registration fee.
- **REGISTER AS SOON AS YOU ARRIVE. ADMISSION BY BADGE ONLY.**
- **ALL SUBJECTS** at the MSMS Annual Session are applicable to clinical medicine. They stress diagnosis and treatment, usable in every-day practice.
- **POSTGRADUATE CREDITS** given to every MSMS member who attends MSMS Annual Session.
- **SIX ASSEMBLIES** and one public meeting—fourteen Section Meetings—three Discussion Conferences, all on September 23-24-25.
- **A DISCUSSION CONFERENCE**—featuring the Guest Essayists of each day—will be held daily from 12:00 noon to 1:00 p.m. in the Black and Silver Ballroom of the Civic Auditorium. Audience participation invited.
- **SECTION MEETINGS** will follow the daily Assemblies—5:00 to 6:00 p.m.
- **PAPERS WILL BEGIN AND END ON TIME.** This scientific meeting will feature by-the-clock promptness and regularity.
- **ONE HUNDRED TWENTY-TWO TECHNICAL EXHIBITS AND TWENTY-ONE SCIENTIFIC EXHIBITS** will contain much of interest and value. Intermissions to view the exhibits have been arranged.
- **W. C. BEETS, M.D., GRAND RAPIDS**, is General Chairman of the Grand Rapids Committee on Arrangements for the 1953 MSMS Annual Session.
- **CABARET-STYLE DANCE AND ENTERTAINMENT**, with the compliments of the Michigan State Medical Society, will be held in the Ballroom of the Pantlind Hotel on Thursday evening, September 24. All who register, and their ladies, will receive a card of admission and are cordially invited to attend.
- **THE WOMAN'S AUXILIARY** to the Michigan State Medical Society will present an attractive social and business program at the Pantlind Hotel, Grand Rapids. The wife of every MSMS member is cordially invited to attend.
- **MEMBERS OF MICHIGAN MEDICAL SERVICE** will meet in annual session, Tuesday, September 22, Ballroom, Pantlind Hotel, at 2:00 p.m., following the annual MMS luncheon at 1:00 p.m.

SCIENTIFIC ASSEMBLY

Wednesday-Thursday-Friday, Sept. 23-24-25, 1953

SAVE AN ORDER FOR THE EXHIBITOR AT THE MICHIGAN STATE MEDICAL SOCIETY ANNUAL SESSION

MICHIGAN STATE MEDICAL SOCIETY

The 88th Annual Session

PANTLIND HOTEL, GRAND RAPIDS, SEPTEMBER 21-22, 1953

HOUSE OF DELEGATES

ORDER OF BUSINESS*

MONDAY, SEPTEMBER 21

Ballroom, Pantlind Hotel, Grand Rapids

10:00 a.m.—First Meeting

1. Call to order by Speaker
2. Report of Committee on Credentials
3. Roll Call
4. Appointment of Reference Committees
   - (a) On Officers' Reports
   - (b) On Reports of The Council
   - (c) On Reports of Standing Committees
   - (d) On Reports of Special Committees
   - (e) On Constitution and By-Laws
   - (f) On Resolutions
   - (g) On Special Memberships
   - (h) On Rules and Order of Business
   - (i) On Legislation and Public Relations
   - (j) On Hygiene and Public Health
   - (k) On Medical Service and Prepayment Insurance
   - (l) On Miscellaneous Business
   - (m) On Executive Session
   - (n) On Emergency Medical Service
5. Speaker's Address—R. H. Baker, M.D., Pontiac
6. President's Address—R. J. Hubbell, M.D., Kalamazoo
7. President-Elect's Address—L. W. Hull, M.D., Detroit
8. Annual and Supplemental Reports of The Council—William Bromme, M.D., Detroit, Chairman
9. Report of Delegates to American Medical Association—W. A. Hyland, M.D., Grand Rapids, Chairman
10. Brief of Annual Report of Woman's Auxiliary President—Mrs. William Mackersie, Detroit
11. Selection of Michigan's Foremost Family Physician
12. Resolutions**

MONDAY SEPTEMBER 21

Ballroom, Pantlind Hotel, Grand Rapids

2:00 p.m.—Second Meeting

13. Supplementary Report of Committee on Credentials
14. Roll Call
15. Reports of MSMS Standing Committees
    - A. Committee on Postgraduate Medical Education
    - B. Preventive Medicine Committee
      - (1) Committee on Rheumatic Fever Control
      - (2) Cancer Control Committee (and Subcommittees)
      - (3) Maternal Health Committee
      - (4) Venereal Disease Control Committee
      - (5) Tuberculosis Control Committee
      - (6) Industrial Health Committee
      - (7) Mental Hygiene Committee
      - (8) Child Welfare Committee
        - (a) Subcommittee on Hearing Defects
        - (b) Subcommittee of Ophthalmologists
      - (9) Iodized Salt Committee
      - (10) Geriatrics Committee
        - (a) Subcommittee to Study Problems of Caring for the Aged
        - (b) Subcommittee on Diabetes Control
    - C. Public Relations Committee (and Subcommittees)
    - D. Ethics Committee
    - E. Legislative Committee
16. Reports of Special Committees
    - A. Beaumont Memorial Restoration Committee (and Subcommittees)
    - B. Scientific Radio Committee
    - C. Advisory Committee to Woman's Auxiliary
    - D. Advisory Committee to Michigan State Medical Assistants Society
    - E. Advisory Committee to National Foundation for Infantile Paralysis

Reports of the Committees of The Council, including Committee on Scientific Work, are included in the Annual Report of The Council

MONDAY, SEPTEMBER 21

Ballroom, Pantlind Hotel, Grand Rapids

8:00 p.m.—Third Meeting

17. Supplementary Report of Committee on Credentials
18. Roll call
19. Unfinished business
20. New business
21. Reports of Reference Committees
    - (a) On Officers' Reports
    - (b) On Reports of The Council
    - (c) On Reports of Standing Committees
    - (d) On Reports of Special Committees
    - (e) On Constitution and By-Laws
    - (f) On Resolutions
    - (g) On Special Memberships
    - (h) On Rules and Order of Business
    - (i) On Legislation and Public Relations
    - (j) On Hygiene and Public Health
    - (k) On Medical Service and Prepayment Insurance
    - (l) On Miscellaneous Business
    - (m) On Executive Session
    - (n) On Emergency Medical Service

*See the Constitution, Articles IV, VII and XII, and the By-Laws, Chapter 8 on "House of Delegates."

**All Resolutions, special reports, and new business shall be presented in writing in triplicate (By-Laws, Chapter 8, Section 10-m).

TUESDAY, SEPTEMBER 22

Ballroom, Pantlind Hotel, Grand Rapids

9:30 a.m.—Fourth Meeting

22. **Supplementary Report of Committee on Credentials**
23. **Roll call**
24. **Unfinished business**
25. **New business**
26. **Supplementary Reports of Reference Committees**

TUESDAY, SEPTEMBER 22

Ballroom, Pantlind Hotel, Grand Rapids
8:00 p.m.—Fifth Meeting

27. **Supplementary Report of Committee on Credentials**
28. **Roll call**
29. **Unfinished Business**
30. **Supplemental Report of The Council**
31. **Supplementary Reports of Reference Committees**
32. **Elections**

(a) Councilors:
11th District—C. A. Paukstis, M.D., Ludington—Incumbent
12th District—A. H. Miller, M.D., Gladstone—Incumbent
13th District—W. S. Jones, M.D., Menominee—Incumbent
17th District—W. B. Harm, M.D., Detroit—Incumbent

(b) Delegates to American Medical Association:
W. A. Hyland, M.D., Grand Rapids—Incumbent
R. A. Johnson, M.D., Detroit—Incumbent
J. S. DeTar, M.D., Milan—Incumbent

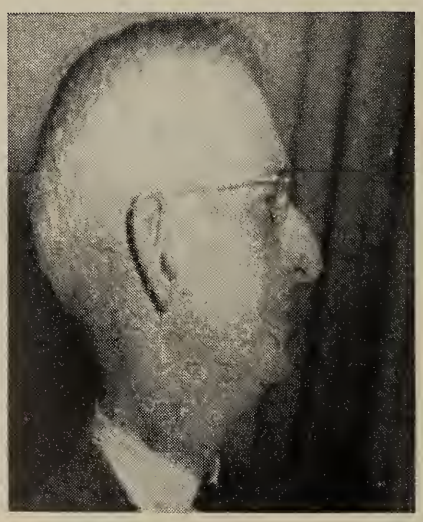
(c) Alternate Delegates to American Medical Association:
E. F. Sladek, M.D., Traverse City—Incumbent
W. W. Babcock, M.D., Detroit—Incumbent
E. C. Texter, M.D., Detroit—Incumbent

(d) President-Elect

(e) Speaker of House of Delegates

(f) Vice Speaker of House of Delegates

33. **Adjournment**



MSMS House of Delegates Speaker Robert H. Baker, M.D., Pontiac, as "fun-processed" by his good friend, C. L. A. Oden, M.D., of Muskegon.

Annual Session Appointments

- *General Chairman of the 1953 MSMS Annual Session*
  W. C. Beets, M.D., Grand Rapids
- *House of Delegates Press Relations Committee*
  J. E. Livesay, M.D., Flint, Chairman
  R. H. Baker, M.D., Pontiac
  H. F. Dibble, M.D., Detroit
  L. Fernald Foster, M.D., Bay City
  R. A. Johnson, M.D., Detroit
  C. A. Payne, M.D., Grand Rapids
- *Scientific Assembly Press Relations Committee*
  C. A. Payne, M.D., Grand Rapids, Chairman
  H. G. Benjamin, M.D., Grand Rapids
  F. C. Brace, M.D., Grand Rapids
  P. W. Kniskern, M.D., Grand Rapids

HOTEL RESERVATIONS
MICHIGAN STATE MEDICAL SOCIETY
88th Annual Session
Grand Rapids, September 21 to 25, 1953

The reservation blank below is for your convenience in making your hotel reservations in Grand Rapids. Please send your application to L. E. Ames, Secretary, Committee on Hotels for MSMS Convention, Pantlind Hotel, Grand Rapids, Michigan. Mailing your application now will be of material assistance in securing hotel accommodations.

As very few singles are available, registrants are requested to co-operate with the Committee on Hotels by sharing a room with another registrant, when convenient.

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L. E. Ames, Secretary,
Committee on Hotels, MSMS Convention,
c/o Pantlind Hotel
Grand Rapids, Michigan

Please make hotel reservation(s) as indicated below:

.....Single Room(s)

.....Double Room(s) for.....persons

.....Twin-Bedded Room(s) for.....persons

Arriving September.....hour.....A.M.....P.M.

Leaving September.....hour.....A.M.....P.M.

Hotel of First Choice:.....

Second Choice:.....

Names and addresses of all applicants including person making reservation:

Name	Address	City	State
.....	.....	.....	.....
.....	.....	.....	.....
.....	.....	.....	.....
.....	.....	.....	.....
.....	.....	.....	.....

Date..... Signature.....

Address..... City.....

MSMS HOUSE OF DELEGATES—1953

Delegates and Alternates

(Names of Alternates appear in Italics)

ALLEGAN

Lewis F. Brown, M.D., 133 E. Allen St., Otsego
Elwin B. Johnson, M.D., 144 Brady, Allegan

ALPENA-ALCONA-PRESQUE ISLE

Elbert S. Parmenter, M.D., 140 E. Washington, Alpena
James E. Spens, M.D., Professional Building, Alpena

BARRY

Alexander B. Gwinn, M.D., City Bank Bldg., Hastings
Herbert S. Wedel, M.D., 304 S. Washington St., Hastings

BAY-ARENAC-IOSCO

Orlen J. Johnson, M.D., 207 N. Walnut, Bay City
Walter S. Stinson, M.D., 101 W. John, Bay City
A. Lawrence Ziliak, Jr., M.D., 707 N. Lincoln, Bay City
Neal R. Moore, M.D., 704 N. Jackson, Bay City

BERRIEN

Donald W. Thorup, M.D., 610 Fidelity Building, Benton Harbor
Franklin A. Rice, M.D., 318 N. Fourth, Niles

BRANCH

Harold J. Meier, 87 W. Pearl St., Coldwater
Robert J. Fraser, M.D., 22 W. Pearl St., Coldwater

CALHOUN

Harvey C. Hansen, M.D., 417 Post Bldg., Battle Creek
Stanley T. Lowe, M.D., 1009 Security Bank Bldg., Battle Creek
Leland R. Keagle, M.D., 196 North Ave., Battle Creek

CASS

Sherman L. Loupee, M.D., Dowagiac
Uriah M. Adams, M.D., Marcellus

CHIPPEWA-MACKINAC

Wm. F. Mertaugh, M.D., Central Savings Bank Bldg., Sault Ste. Marie
Earl S. Rhind, M.D., 300 Court St., Sault Ste. Marie

CLINTON

Franklin W. Smith, M.D., St. Johns
William B. McWilliams, M.D., Maple Rapids

DELTA-SCHOOLCRAFT

William A. Lemire, M.D., 1106 1st Ave., So., Escanaba
Albert H. Miller, M.D., 904 Wisconsin, Gladstone

DICKINSON-IRON

Lionel E. Irvine, M.D., 326 W. Genesee, Iron River
Donald R. Smith, M.D., 107 E. A St., Iron Mountain

EATON

Paul H. Engle, M.D., Olivet
Byron P. Brown, M.D., Charlotte

GENESEE

Frank D. Johnson, M.D., 312 Paterson Bldg., Flint
Jackson E. Livesay, M.D., 621 Mott Fd. Bldg., Flint
Clifford W. Colwell, M.D., 706 Citizens Bank Bldg., Flint
Leon M. Bogart, M.D., 1008 Genesee Bank Bldg., Flint
Robert M. Bradley, M.D., 420 Genesee Bank Bldg., Flint
Franklin W. Baske, M.D., 923 Maxine St., Flint
Fleming A. Barbour, M.D., 1439 Mott Fd. Bldg., Flint
George E. Anthony, M.D., 1015 Detroit St., Flint
Southard T. Flynn, M.D., 1121 Mott Fd. Bldg., Flint
H. Maxwell Golden, M.D., 215 N. Saginaw, Flint

GOGEBIC

David C. Eisele, 109 E. Aurora St., Ironwood
John R. Franck, Jr., M.D., Wakefield

GRAND TRAVERSE-LEELANAU-BENZIE

Donald G. Pike, M.D., 876 E. Front, Traverse City
Charles E. Lemen, M.D., 216½ E. Front, Traverse City

GRATIOT-ISABELLA-CLARE

Myron G. Becker, M.D., Edmore
Earle S. Oldham, M.D., Breckenridge

HILLSDALE

Arthur W. Strom, M.D., 32 S. Broad St., Hillsdale
Luther W. Day, M.D., 111 Evans Street, Jonesville

HOUGHTON-BARAGA-KEWEENAW

John T. P. Wickliffe, M.D., 1167 Calumet Ave., Calumet
Alfred La Bine, M.D., 1019 College Ave., Houghton

HURON

Charles W. Oakes, Jr., M.D., Harbor Beach
Edward E. Steinhardt, M.D., Elkton

INGHAM

Franklin L. Troost, M.D., 4341 W. Delhi Rd., Holt
Kenneth H. Johnson, M.D., 1116 Olds Tower, Lansing
Oliver B. McGillicuddy, M.D., 1816 Olds Tower, Lansing
John M. Wellman, M.D., 301 Seymour, Lansing
K. W. Toothaker, M.D.. 320 Townsend, Lansing
Edmund J. Robson, M.D., 215 N. Walnut, Lansing
Leo W. Walker, M.D., St. Lawrence Hosp., Lansing
Roland E. Kalmbach, M.D., 301 Seymour St., Lansing

IONIA—MONTCALM

William L. Bird, M.D., Greenville
Milton E. Slagh, M.D., Saranac

JACKSON

Woodward A. Wickham, M.D., 420 W. Michigan Ave., Jackson
Nathan D. Munro, 740 W. Michigan Ave., Jackson
Charles R. Lenz, 405 First St., Jackson
George M. Baker, M.D., Parma

KALAMAZOO
Wm. A. Scott, M.D., 208 Bronson Med. Center, Kalamazoo
Irmel W. Brown, M.D., 306 Kalamazoo Nat. Bank Bldg., Kalamazoo
Frederick C. Ryan, M.D., 507 S. Burdick, Kalamazoo
Paul M. Fuller, M.D., 419 S. Burdick, Kalamazoo
Wm. R. Kavanaugh, M.D., 1029 W. North St., Kalamazoo
Harold A. Machin, M.D., 420 John St., Kalamazoo

KENT
Luther C. Carpenter, Jr., M.D., 604 Metz Bldg., Grand Rapids
Guy W. DeBoer, M.D., 220 Medical Arts Bldg., Grand Rapids
Andrew Van Solkema, M.D., 953 E. Fulton, Grand Rapids
Aaron V. Wenger, M.D., 302 Loraine Bldg., Grand Rapids
W. F. Fuller, M.D., 421 Medical Arts Bldg., Grand Rapids
W. B. Mitchell, 507 Medical Arts Bldg., Grand Rapids
Richard A. Rasmussen, M.D., Blodgett Medical Bldg., Grand Rapids
Kenneth E. Fellows, M.D., Metz Building, Grand Rapids
Charles H. Frantz, M.D., Blodgett Medical Bldg., Grand Rapids
Harvey M. Andre, M.D., 201 Medical Arts Bldg., Grand Rapids
John T. Boet, M.D., 503 Loraine Bldg., Grand Rapids
Albert Van't Hof, M.D., Metz Bldg., Grand Rapids

LAPEER
Daniel J. O'Brien, M.D., Nepassing St., Lapeer
Edward H. Lass, M.D., Lapeer

LENAWEE
Keith H. Whitehouse, M.D., 118 W. Main St., Morenci
Richard E. Dustin, M.D., 103 E. Chicago, Tecumseh

LIVINGSTON
Harold C. Hill, M.D., 116 N. Michigan, Howell
L. F. May, M.D., 110 N. Michigan, Howell

LUCE
William R. Purmort, M.D., Newberry
Mathew A. Surrell, M.D., Newberry

MACOMB
Sidney Scher, M.D., 132 Cass Ave., Mt. Clemens
Oscar D. Stryker, M.D., Macomb Co. Health Dept., Mt. Clemens

MANISTEE
Ellery A. Oakes, M.D., 401 River St., Manistee
John F. Konopa, M.D., 57 Poplar St., Manistee

MARQUETTE-ALGER
Archie S. Narotzky, M.D., Odd Fellows Bldg., Ishpeming
Benzoin C. Baron, M.D., Munising

MASON
Herbert G. Bacon, M.D., Scottville
Ephraim B. Boldyreff, M.D., Custer

MECOSTA-OSCEOLA-LAKE
Paul Ivkovich, M.D., Reed City
Gordon H. Yeo, M.D., 126 Maple St., Big Rapids

MEDICAL SOCIETY OF NORTH CENTRAL COUNTIES
Louis F. Hayes, M.D., Grayling
Gordon L. McKillop, M.D., Gaylord

MENOMINEE
John R. Heidenreich, M.D., Daggett
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Oliver R. MacKenzie, M.D., 128 Common St., Walled Lake
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Wm. F. Strong, M.D., Ontonagon

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William Westrate, Sr., M.D., Holland

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William B. Kerr, M.D., 300 S. Michigan, Saginaw
Leonard J. Morgrette, M.D., 603 S. Jefferson, Saginaw

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(All meetings of Reference Committees will be held in the *Pantlind Hotel,* Grand Rapids.)

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D. G. Pike, M.D.....Traverse City
A. W. Strom, M.D.....Hillsdale

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N. W. Scholle, M.D.....Muskegon Heights
W. R. Young, M.D.....Lawton
J. F. Beer, M.D.....St. Clair

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H. C. Hansen, M.D.....Battle Creek
F. D. Johnson, M.D.....Flint
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D. I. Sugar, M.D.....Detroit
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R. A. Johnson, M.D.....Detroit
C. A. Payne, M.D.....Grand Rapids

Annual Reports

ANNUAL REPORT OF THE ARBITRATION COMMITTEE (Uniform Fee Schedule for Governmental Agencies)—1952-1953

The Committe had four meetings in 1953 and disposed of twenty-five items.

The work has been pleasant and we hope we have been of service.

Respectfully submitted,
T. H. Hunt, M.D., *Chairman*
A. E. Catherwood, M.D.
C. K. Hasley, M.D.
I. S. Schembeck, M.D.
Arch Walls, M.D.
Mr. J. W. Castellucci, *Advisor*

ANNUAL REPORT OF MEDICAL PROCUREMENT ADVISORY COMMITTEE—1952-1953

The Medical Procurement Advisory Committee had one formal meeting during the year on January 15, 1953. It was the joint meeting with the Michigan State Director of Selective Service and the Michigan State Voluntary Advisory Committee to Selective Service. The purpose of the meeting was to further mutual understanding between the groups represented and to arrange certain technical methods of handling problems. In addition to the work concerned with the meeting, the various individuals of the State Committee have been active in local committees and ironing out local problems.

Respectfully submitted,
C. I. Owen, *Chairman*
M. J. Capron, M.D.
C. H. Frantz, M.D.
W. H. Huron, M.D.
E. C. Miller, M.D.
E. A. Oakes, M.D.
G. C. Penberthy, M.D.
H. H. Stryker, M.D.

ANNUAL REPORT OF COMMITTEE ON BLOOD BANKS—1952-1953

There has been no meeting of the Committee on Blood Banks during the year. No problems or requests were presented to the Chairman. There were apparently no continuing problems requiring attention. Regional problems have been studied by local and county committees.

Respectfully submitted,
Walter A. Stryker, M.D., *Chairman*
W. B. Cooksey, M.D.
R. H. Holmes, M.D.
A. A. Humphrey, M.D.
Hazel R. Prentice, M.D.

ANNUAL REPORT OF COMMITTEE ON COURSES IN MEDICAL ECONOMICS—1952-1953

The Committee on Courses in Medical Economics has held no stated meetings, but there has been considerable interchange between the members of the committee by telephone and otherwise.

The Chairman was able to arrange a series of only three lectures on medical economics at the University of Michigan due to the lateness of his appointment and was unable to arrange any schedule at Wayne University for the current year.

Conversations with the president elect and other officers indicated no opposition to the activity of the committee in setting up at least a skeleton program for the coming year to be handed over to the new committee whenever it is appointed. This series of lectures will cover the first semester at least and possibly the second semester as well.

The Committee recommends in view of the past history of the work of this and previous committees that at least one or two members hold over each year in order to keep the work of the committee functional and to avoid the disadvantage of a late start as has happened so frequently in the past.

Respectfully submitted,
R. Wallace Teed, M.D., *Chairman*
L. Fernald Foster, M.D.
E. A. Osius, M.D.
J. R. Rodger, M.D.
E. F. Sladek, M.D.

ANNUAL REPORT OF CHILD WELFARE COMMITTEE—1952-1953

The interests of the Committee were centered around the whole subject of child welfare as it applied to Michigan and our efforts were aimed at the improvement of child health as it applied to the state as a whole. The Committee was ably assisted by and co-operated with the Michigan Department of Health in its efforts towards this goal.

The Sub-Committee of Ophthalmologists was extremely active in the field of Severe Visual Handicaps in childhood and continued its efforts to investigate and advise on Retrolental Fibroplasia. The entire Committee met at The Michigan School for the Blind, Lansing, in order to obtain factual evidence on the problem in Michigan.

The Sub-Committee on Hearing Defects continued active co-operation with the Michigan Department of Health in the hearing testing program.

Other problems considered by the Committee with recommendations to the Michigan State Medical Society were the subject of intern training in pediatrics in Michigan hospitals; gamma globulin in poliomyelitis prophylaxis; adoption of children in the state; the present facilities for diagnosis and treatment of epilepsy and the problem of seriously emotionally disturbed children.

A Sub-Committee to Study the whole Subject of Accident Prevention in Childhood, both locally and nationally, was appointed and will report at a later date.

The Chairman wishes to express his appreciation for the active participation of the Committee members at meetings and hopes that their discussions and recommendations have been of help to the Michigan State Medical Society.

Respectfully submitted,
G. E. Anthony, M.D., *Chairman*
W. N. Braley, M.D.
G. B. Corneliuson, M.D.
Carleton Dean, M.D.
M. J. Feeley, M.D.
J. B. Hassberger, M.D.
Ruth E. Lalime, M.D.
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M. F. Osterlin, M.D.
E. T. Palm, M.D.
A. L. Richardson, M.D.
R. S. Simpson, M.D.
L. P. Sonda, M.D.
J. N. P. Struthers, M.D.
H. A. Towsley, M.D.

Michigan's Department of Health

Albert E. Heustis, M.D., Commissioner

DISTRIBUTION OF POLIOMYELITIS IMMUNE GLOBULIN IN MICHIGAN

Michigan's basic allocation of poliomyelitis immune globulin (human) is computed on the average number of cases of poliomyelitis reported to the state health department during 1947 through 1950 multiplied by 60 cc.

Since the average number of cases is 1,564, the basic allotment is 93,840 cc. The dose of poliomyelitis immune globulin (human) is 0.14 cc. per pound body weight, an average dose of 7 cc. per person. Michigan's basic allotment will permit injection of approximately 13,406 persons.

A reserve of approximately 33 per cent of the total stockpile has been retained by the national allocating authority for use in mass community prophylaxis in epidemic areas. An additional 10 per cent has been retained for unusual or special situations.

In addition to the basic allocation, there will be further allocations based on the following criteria:

(A) States and Territories shall receive, at appropriate intervals, additional allocations of 60 cc. for each reported case in excess of the mean cumulative annual incidence for the same seasonal period. It may be necessary to make adjustments in these additional allocations to individual states, depending upon the proportion of paralytic cases reported.

(B) About July 1, and at bi-weekly intervals thereafter until October 1, supplementary allocations will be made to States and Territories in proportion to the typical seasonal incidence of poliomyelitis in the United States for the period following the allocation at a level designed to distribute the supply by October 1. Allocation will be proportional to the morbidity then being reported.

(C) Special allocations from the reserve retained by the national allocating authority for mass prophylaxis shall be available upon application by the State or Territorial Health Officer to the national allocating authority.

Michigan's basic allotment of poliomyelitis immune globulin is expected to arrive sometime late in May. Half of it will be distributed to the full-time county, district and city health departments.

First priority for use of poliomyelitis immune globulin shall be for household contacts thirty years of age or under of clinically diagnosed cases, and pregnant women of any age.

Second priority shall be for intimate contacts of poliomyelitis cases beyond the household group, within the limits of the amount of poliomyelitis immune globulin available, the contacts to be fifteen years of age or under and pregnant women of any age. This method is intended to include only extremely close extrafamilial contacts of a case, with preference given to the most susceptible age group involved.

The third priority shall be for community prophylaxis, the injection of the most susceptible age groups in areas with exceptionally high epidemic incidence. This has been shown to be effective in direct proportion to the incidence of the disease. Careful epidemiological study by qualified persons is indicated prior to use in this manner, and prior approval must be obtained from the Division of Disease Control, Records and Statistics of the Michigan Department of Health.

When the State's basic allotment of poliomyelitis immune globulin is received full-time health departments will be instructed to release it to physicians based on the physician furnishing the name and date of onset of the case as well as the names, ages and weights of household contacts to be injected. Since immune serum globulin is all labeled "Caution—Federal Law Prohibits Dispensing Without Prescription," the physician's signature will be necessary.

As the health jurisdictions distribute their initial supply, they will be able to have it replenished from the Michigan Department of Health within the available supply of the product up to the amount they have distributed.

In those counties in which there is no full-time health department, strategically located hospitals will be used as distributing centers.

LAST SUMMER'S POLIO STUDIED

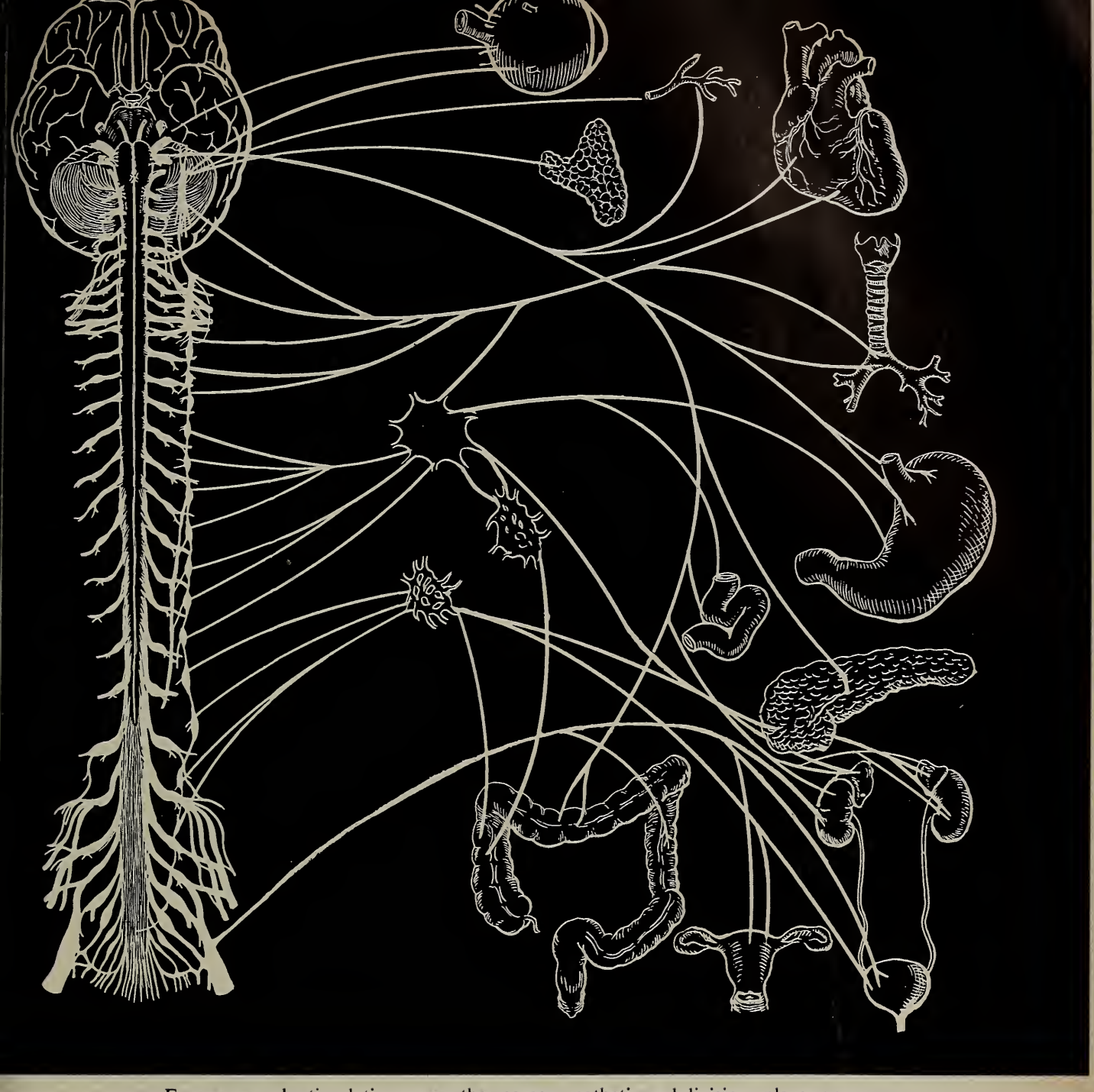
Analysis of the polio incidence of last summer shows that 75 per cent of the 3,912 cases reported were in children fifteen years of age and under and over half were in children under ten. Age range was from under one to sixty-two years.

The 1952 total of 3,912 reported cases exceeded the 1,463 in 1951, the 2,029 in 1950 and the 2,909 in 1949, the previous high year.

Cases reported in 1952 were about evenly divided between the paralytic and nonparalytic types, 51 per cent paralytic and 49 per cent nonparalytic. This is the average Michigan experience. About one out of every twenty cases resulted in death.

Unusual in the 1952 experience were the eighty-three cases reported in babies under one year of age.

The 1952 epidemic reached its peak the last week in August, about the time it is usually expected in Michigan.



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In Memoriam

CHARLES W. BEERS, M.D., of Muskegon Heights, died March 28, 1953, at the age of fifty-eight.

For the past twelve years, Dr. Beers had served the community of Muskegon Heights, and, previous to that, he practiced in Holton.

Dr. Beers was graduated from Wayne University College of Medicine in 1933, and interned at Hackley Hospital, Muskegon.

He was a member of the Muskegon County Medical Society, the American Society of Anesthesiologists, and Phi Beta Pi, a medical fraternity.

Dr. Beers is survived by his wife, Ruth; his mother, Mrs. Ida Beers, of Muskegon; a son, Richard; a daughter, Mrs. William Bell; and a brother, Henry L. Beers, of Muskegon.

WARD S. FERGUSON, M.D., of Grand Rapids, died April 16, 1953, at the age of the sixty-six.

Dr. Ferguson was graduated from the Chicago College of Medicine and Surgery in 1910. He had served the community of Grand Rapids as a proctologist until his retirement three years ago. He was one of the founders of the present Ferguson-Droste-Ferguson Hospital in Grand Rapids.

Besides his wife, Ann, he is survived by three sons and one daughter. They are: Mrs. Phyllis Lampman, of Kalamazoo; Ward Ferguson, of Ludington; James A. Ferguson, M.D., of Grand Rapids; and Frederick G. Ferguson, M.D., of Flint. He also leaves a brother, Lynn A. Ferguson, M.D., of Grand Rapids.

THELMA FREEMAN (ARNELL), M.D., of Detroit, died March 23, 1953, at the age of sixty.

Dr. Freeman had practiced medicine in Detroit since her graduation from the University of Michigan in 1924. She was on the staff of Woman's Hospital, Detroit.

Dr. Freeman was a member of the Wayne County Medical Society, the Woman's Medical Association, the Detroit Blackwell Society and Alpha Epsilon Iota Medical sorority.

She is survived by her husband, Dwayne Arnell, and a brother, George D. Freeman.

WM. G. HUTCHINSON, M.D., of Birmingham, died March 26, 1953, at the age of seventy-six.

Dr. Hutchinson had practiced medicine in Detroit and the surrounding area for forty-three years. He was graduated from the Detroit College of Medicine in 1897.

Dr. Hutchinson was attending physician at Children's Free Hospital from 1900 to 1910. He was professor of anatomy at the Detroit College of Medicine from 1903 to 1913. During that time, Dr. Hutchinson was also surgeon to the 1st Battalion of the Michigan Naval Brigade. His service extended from 1904 to 1910.

In 1940, Dr. Hutchinson became Medical Co-ordinator of the Michigan Crippled Children Commission. He

(Continued on Page 666)

50 YEARS AGO

". . . in all cases where the milk supply is not private and its conditions fully known, all milk for use in the nursery should be boiled immediately upon its arrival in the house. . . . Milk completely sterilized by several exposures to heat . . . and hermetically sealed, will keep sweet for many weeks, and this device is most valuable for long journeys or ocean voyages."

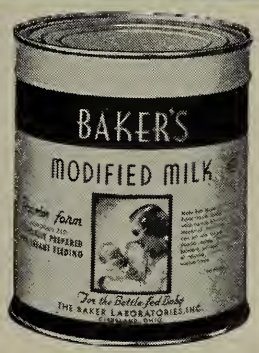
(1)





Baker's Modified Milk *Powder* is suggested for baby's safety when traveling. Mother can put the prescribed amount of powder for each feeding in a capped, sterile nursing bottle and carry boiled water in a Thermos bottle. Each feeding can then be prepared just before use.

The powder is also especially adaptable for use wherever refrigeration facilities are not available. Here, too, individual feedings may be mixed as needed.



POWDER and LIQUID

Baker's Modified Milk is made from Grade A Milk (U. S. Public Health Service Milk Code), which has been modified by replacement of the milk fat with animal and vegetable oils and by the addition of carbohydrates, vitamins and iron.

BAKER'S MODIFIED MILK *POWDER FORM*

Simplifies infant feeding when traveling and whenever refrigeration facilities are not available

(1) Cheadle—*Artificial Feeding and Food Disorders of Infants*, Sixth Edition (1906)

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Convalescence is associated with protein loss of serious magnitude, yet little is known of the fundamental nature of the loss.[1] Loss of nitrogen cannot be prevented; however, nitrogen balance can be maintained, wound healing enhanced, and convalescence shortened, by a high protein diet.[2]

Otherwise the patient uses his own "available" nitrogen stores to accomplish the healing defect.[3]

The patient "is better off before his nitrogen stores have been wasted than after. Surgeons have long noted that chronically debilitated patients are poor operative risks."[1] Decubitus ulcers heal quickly in heavily protein-fed patients.[4]

These facts are clear, as is also the fact that Knox Gelatine, which is pure protein, offers a useful method of supplementing the ordinary dietary protein.

Knox Gelatine is easy to digest, while its supplementary dietary nitrogen will furnish protein without other substances, especially salts of potassium which are retained during convalescence; without excess fat and carbohydrate, which are not needed especially; and without a food volume which may interfere with intake.

1. Howard, J. E. Protein Metabolism During Convalescence After Trauma. Arch. Surg. 50:166, 1945.
2. Co Tui, Minutes of the Conference on Metabolism Aspects of Convalescence Including Bone and Wound Healing. Josiah Macy, Jr. Foundation, Fifth Meeting Oct. 8-9, p. 57, 1943.
3. Whipple, G. H. and Madden, S. C. Hemoglobin, Plasma Protein and Cell Protein: Their Interchange and Construction in Emergencies. Medicine 23:215, 1944.
4. Mulholland, J. H., Co Tui, Wright, A. M., Vinci, V., and Shafiroff, B. Protein Metabolism and Bed Sores. Am. Surg. 118:1015, 1943.



AVAILABLE AT GROCERY STORES IN 4-ENVELOPE FAMILY SIZE AND 32-ENVELOPE ECONOMY SIZE PACKAGES

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"Feeding the Sick and Convalescent."
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KNOX GELATINE U.S.P. ALL PROTEIN NO SUGAR

WM. G. HUTCHINSON, M.D.

(Continued from Page 664)

retired in 1950. Dr. Hutchinson was a life member of the Michigan State Medical Society and a member of the Oakland County Medical Society.

He is survived by his wife, Emma; a daughter, Mrs. Elliott M. Gordon, of Providence, R. I.; a son, F. William Hutchinson; and six grandchildren.

PITT S. WILSON, M.D., of Muskegon, died March 31, 1953, at the age of seventy-four.

Dr. Wilson received his medical degree from the University of Illinois College of Medicine in 1907. After interning at Ziegler, Illinois, he began the practice of medicine in Negaunee as physician and surgeon for the Steel Trust Corporation. He came to Muskegon in 1916.

Dr. Wilson had served as president of the Muskegon County Tuberculosis Association since 1926. He was active in the establishment of the Muskegon County Tuberculosis Sanatorium.

Dr. Wilson was a member of the Muskegon County Medical Society and served as its president in 1926. He was a life member of the Michigan State Medical Society. He had also been Chief of Medicine at Hackley Hospital in Muskegon.

The Muskegon County Medical Society had submitted Dr. Wilson's name to the Michigan State Medical Society as Muskegon's candidate for the title of Michigan's Foremost Family Physician for 1953.

Dr. Wilson is survived by his wife, Una, and a daughter, Mrs. E. LaVerne Johnson, of North Muskegon.

ERNEST A. WITTWER, M.D., of Bay City, died March 20, 1953, at the age of seventy-seven.

Until his retirement in 1950, he served the community of Bay City for thirty years. Dr. Wittwer was also an attorney. He received his law degree from the Detroit College of Law in 1915. He was graduated from the Saginaw Valley Medical College in 1900.

Dr. Wittwer was born in Switzerland and came to the United States at the age of seventeen. He pursued postgraduate studies at Polytech Clinic in Zurich, Switzerland.

Before coming to Bay City, Dr. Wittwer had practiced in Auburn and Detroit. He was a member of the Bay County Medical Society and a life member of the Michigan State Medical Society.

He is survived by his wife, Anna, and a daughter, Mrs. Henriette Calhoun of Bay City.

* * *

The American Medical Association headquarters office was saddened when employes learned, April 15, that Dr. Raymond Hussey, sixty-nine, scientific director of the AMA Council on Industrial Health, had passed away in St. Luke's hospital, Chicago, following a short illness. He had been associated with the AMA for the last three years, and was widely known among physicians in industry. Before coming to the AMA he served as dean of the School of Occupational Health, Wayne University, Detroit, and, during World War II, he was director of the Army Industrial Hygiene Laboratory, Baltimore. He is survived by a widow and a brother. Burial took place in Baltimore.

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Communications

L. Fernald Foster, M.D., Secretary MSMS
Lansing 15, Michigan

Dear Dr. Foster:

I appreciate, very much, your kind letter of March 12. The small contribution I have made toward cancer control would not have been possible without the confidence and help of my associates.

I have been particularly happy that the State Medical Society has approved and worked with the activities of the American Cancer Society. I have always felt that the physicians should control all the medical activities of this great voluntary health organization.

The public is active in this fight against cancer and it has always seemed to me that a voluntary health organization has the unique opportunity of keeping us out of Socialized Medicine provided doctors control its medical activities.

Sincerely yours,

HARRY M. NELSON, M.D.

April 4, 1953

* * *

Dear Dr. Haughey:

You may recall that last year I spoke about having some Basic Science data published in your journal for the purpose of getting some facts to the medical doctors of Michigan.

The American Association of Basic Science Boards made a two-year survey of failures of all the Boards for 1950 and 1951 as a representative period. Table I enclosed is the result of this survey.

Then our own Board made a study and compilation of our own failures for each subject for each year and for the whole year by years. Table II is the result of this study.

If this information could be published in your State Journal, it would give your profession in Michigan a picture of our own Board and its relation to the other Boards in the country, so any conclusions the members wished to draw could be based on facts instead of rumor or hearsay.

Thanking you for the favor of trying to be of some help to the healing art in Michigan through the release of these data, I am

Most sincerely,

ORIN E. MADISON, *President*
Michigan State Board of Examiners in the Basic Sciences

Lansing, Michigan
April 21, 1953

TABLE I.

BASIC SCIENCE EXAMINATION FAILURES BY STATES — 1950-51

State Board	Candidates	No. Failed	% Failed
1. Iowa	2883	1863	64.6
2. Minnesota	1552	860	55.4
3. Connecticut	166	75	45.3
4. Arizona	195	78	40.0
5. Oregon	377	140	37.2
6. Wisconsin	649	222	34.1
7. Nevada	6	2	33.3
8. Florida	1521	440	28.9
9. South Dakota	190	53	27.9
10. New Mexico	202	51	25.2
11. Washington	522	132	25.1
12. Nebraska	275	66	24.0
13. Texas	255	60	23.5
14. Arkansas	263	56	21.3
15. MICHIGAN	**1141**	**224**	**19.6**
16. Colorado	376	70	18.6
17. Road Island	184	33	17.9
18. Tennessee	424	59	14.0
19. Oklahoma	154	12	7.8
20. Dist. of Columbia	48	3	6.3
Totals	11,383	4499	39.5

This compilation of data from original Board sources shows that Michigan is fifteenth from the TOP in percent of failures. The Michigan percent of failures for the two-year period of 1950-51 is but HALF the NATIONAL AVERAGE.

Presented at the Ninth Annual Meeting of the American Association of Basic Science Boards, February 11, 1952, by Orin E. Madison, President, Michigan Basic Science Board.

TABLE II.

MICHIGAN BASIC SCIENCE EXAMINATION FAILURES BY YEARS AND BY SUBJECTS

Year	No. Candidates	No. Failed	% Failed	% Failures by Subject					
				Anatomy	Bacteriology	Chemistry	Hyg. & P.H.	Path.	Physiology
1940	76	23	30.3	11.8	2.6	6.6	2.6	13.1	14.5
1941	160	26	16.2	9.4	6.3	4.4	6.3	8.7	6.3
1942	245	87	35.6	9.8	10.4	13.8	7.4	11.4	7.4
1943	300	72	24.0	13.0	4.0	11.7	6.7	6.2	8.0
1944	457	147	32.0	12.6	5.7	10.2	6.8	10.0	12.2
1945	403	121	30.0	10.9	3.7	12.0	4.2	9.7	7.7
1946	352	119	33.8	13.1	14.3	11.1	8.5	13.2	9.7
1947	397	121	30.4	19.6	5.8	6.8	8.1	6.5	11.8
1948	451	89	19.6	5.6	3.1	3.7	11.9	2.9	4.6
1949	447	100	22.4	7.1	11.3	4.5	4.0	6.0	6.7
1950	639	131	20.5	10.0	7.5	6.0	6.0	7.3	8.3
1951	502	93	18.5	7.2	7.2	7.4	7.0	5.0	8.8
1952	599	134	22.4	13.9	6.1	9.4	5.5	12.1	9.7

Commissioner A. E. Heustis, M.D.
Michigan Department of Health
Lansing, Michigan

Dear Dr. Heustis:

At its meeting of April 23, the Executive Committee of The Council, Michigan State Medical Society, considered the minutes of the Maternal Health Committee meeting of April 16, specifically Item 3, which is quoted as follows:

"*Serology:* The Committee considered the latest developments on the regulation regarding serology which appears on page 12 of the Michigan Department of Health Rules and Regulations for Hospitals. The matter was discussed by all present.

"MOTION: That consideration of the mandatory 30-day Kahn thirty days before delivery by this and other Committees of the Michigan State Medical Society are in agreement and it is recommended by this Committee that it be deleted from the Michigan Department of Health Rules and Regulations for Licensing Maternity Hospitals. Carried."

The Executive Committee of The Council on April 23 approved the minutes of the Maternal Health Committee's meeting of April 16.

Sincerely,
L. Fernald Foster, M.D.,
Secretary.

May 4, 1953

* * *

Dear Doctor Haughey:

I thought you would be interested in the attached copy of letter received from the Surgeon General's office regarding their news release on the conversion of diathermy equipment.

I judge from the last paragraph of his letter that they are not in position to release any information on the conversion of diathermy equipment.

Yours very truly,
R. A. Cripe
Vice President
The Burdick Corporation

Milton, Wisconsin
March 30, 1953

DEPARTMENT OF THE ARMY
Office of the Surgeon General
Washington 25, D. C.

18 February 1953

Mr. R. A. Cripe
Vice President
The Burdick Corporation
Milton, Wisconsin

Dear Mr. Cripe:

This is in reply to your letter of January 27, 1953, regarding Army conversion of diathermy equipment.

The Army modification program has been done only on the one model, SWDX-80, built to Federal specifications during the period 1942 to 1946. The type approval certificate furnished the Army by the Federal Communications Commission applies only to units modified by the Army and cannot be issued to other agencies or individuals.

I am very sorry that the last paragraph of our release was in error.

Sincerely,
L. G. Alexander
Lt. Col., MSC
Chief
Technical Liaison Office

CALIFORNIA

A new illustrated booklet is available, describing the hospitals of the California Department of Mental Hygiene and listing the professional opportunities there. Physicians are invited to write for this publication.

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In addition to private conferences as needed, group re-education is indispensable in leading the patient back toward total abstinence.

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Pantlind Hotel-Civic Auditorium, Grand Rapids
Wednesday-Thursday-Friday, September 23-24-25, 1953
YOU ARE URGED TO ATTEND!

MICHIGAN AUTHORS

G. L. Waldbott, M.D., of Detroit, Michigan, is the author of an article, "Smoker's Respiratory Syndrome, A Clinical Entity," published in *The Journal of the American Medical Association,* April 18, 1953.

Martin J. Urist, M.D., of South Haven, Mich., is the author of an article, "Bilateral Superior Oblique Paralysis," published in the *American Medical Association Archives of Ophthalmology,* April, 1953.

Alvin R. Lewis, University of Michigan School of Medicine, is the author of an article, Diabetes Mellitus and Insulin," published in *The Journal of the Student American Medical Association,* April, 1953.

H. Rosenbaum, M.D., and **W. S. Reveno, M.D.,** of Detroit, Michigan, are the authors of an article, "Agranulocytosis and Toxic Hepatitis from Methimazole," published in *The Journal of the American Medical Association,* May 2, 1953.

A. Waite Bohne, M.D., and **C. E. Rupe, M.D.,** of Detroit, Michigan, are the authors of an article, "Hyperchloremic Acidosis; a Study of the Mechanism in Ureterosigmoidostomy," published in *Surgery, Gynecology and Obstetrics,* May, 1953.

* * *

Four Korean medical schools will receive approximately $7,500 worth of new medical books sent by the United Nations' Korean Reconstruction Agency through CARE.

Part of $150,000 worth of new text and reference books (exclusive of packing and transportation costs) that CARE is buying and shipping to war-depleted Korean universities for UNKRA, the medical volumes will represent 1,252 titles, the headquarters of CARE, New York City, reports. Ninety per cent are American books, with the balance English, French and German titles. UNKRA is purchasing additional Japanese titles in the medical and other book categories covered by the project, which will cost an over-all total of $200,000 and provide 50,000 to 60,000 new books.

Medical titles bought by CARE were specifically requested from UNKRA by the recipient institutions: the medical schools of Seoul National, Chun Nam, Kyun Puk and Ewha Women's Universities. First shipment is due to arrive in Pusan in mid-May.

Their arrival will also mark the resumption of service to Korea by the CARE-UNESCO Book Fund, which had been forced to suspend service to that country when hostilities began. Individual contributions in any amount can now be sent to the Book Fund at any CARE office to provide new medical and other scientific books for Korean universities and libraries. Donors may designate the category of book and a specific institution, or may ask CARE to choose the recipient.

* * *

John J. Hanlon, M.D., former professor of public health practice at University of Michigan, has been named director of Technical Co-operation Administration's health and sanitation staff.

* * *

A compilation by the Army Surgeon General's office shows that of the 12,527 physicians coming into the three military services since start of the Korean war, only six have been denied commissions on grounds of questionable loyalty. The ratio for dentists is about the same, three out of 5,409.

Although forty-two physicians and dentists have been inducted as privates during the period, thirty-one were subsequently commissioned or discharged for physical disability. Some of the thirty-one, the Army said, simply waited too long to apply for a commission, and others were misinformed about the facts in their particular cases prior to induction. Several are known to have neglected to ask for a commission in the mistaken belief that they were not physically acceptable. Later, after induction, they qualified under the new lower standards for medical officers.

The tabulation:

Physicians

	Army	Navy	Air Force
Total number drafted as enlisted men	16	0	8
Commissioned after induction	12	0	6
Not commissioned because of loyalty factor	4	0	2

* * *

Lewis Cohen, M.D., of Detroit, spoke on "Electromyography; A Diagnostic Adjunct in Neuromuscular

(Continued on Page 672)



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. . . and you'll see an instrument professionally designed and styled for modern doctors' offices and examination rooms. Housed in hand-rubbed, 3" x 7½" solid-walnut case with satin finish brass trim.

Dependable, accurate mechanism is the same as in the time-proven pocket-model Tycos Aneroid.

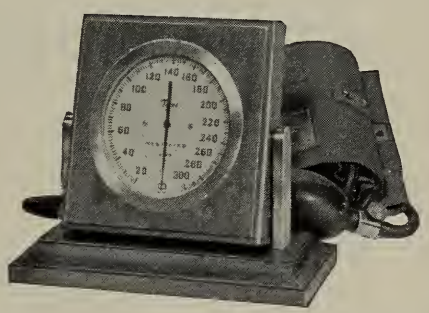
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(Continued from Page 670)

Disorders" to the Medical Division, Detroit Regional Office of Veterans Administration, March 20, 1953; Central Medical Society on April 7, 1953; Wayne County Optometric Society on April 13, 1953.

* * *

A new pamphlet—"A Doctor for your Community"—will be published some time in June by the American Medical Association. This booklet, directed toward communities seeking a physician, describes briefly the problems involved in obtaining a doctor, the things a community can do to attract and keep a doctor, and examples of what has been done elsewhere. A joint project of the Council on Medical Service, Council on Rural Health and Department of Public Relations, the booklet will be available to state medical societies for distribution to communities listed with their placement services.

In addition, the Council on Medical Service has compiled information from numerous state placement services in a reprint which will be especially useful to state societies interested in expanding their activities in this field.

* * *

A complete bibliography of published literature dealing with the medical aspects of civil defense has been compiled by the Council on National Emergency Medical Service. This listing will be available on request from the Council after May 15.

* * *

A newsletter entitled "Parade of Progress," carrying items of interest to rural health leaders, will be instigated late in May by the Council on Rural Health. This news sheet, to be published periodically, will be sent to a special list of state rural health committee chairmen, agricultural extension service personnel and farm organization leaders.

* * *

Hamilton Cameron, M.D., of New York City, has evolved a method of hand symbols by which the paraplegic may communicate his wants and other information. The doctor was suffering from a complete right hemiplegia and aphasia, and to meet his needs devised a system of hand signs which he has had published. The system is available without charge upon request. Address Hamilton Cameron, M.D., 601 West 110th Street, Suite 3LL, New York 25, N. Y.

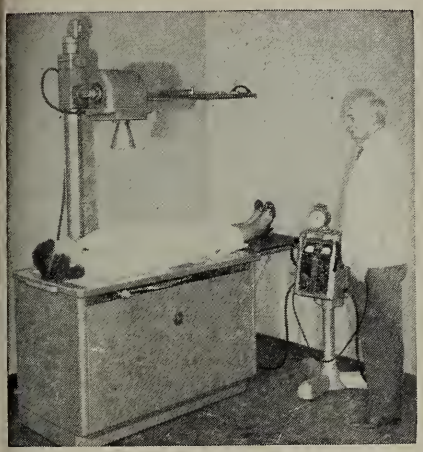
* * *

For the first time in history, hospital births topped the three million mark. The Council on Medical Education and Hospitals' 32nd presentation of hospital statistics reveals that in 1952 there were 3,170,495 hospital births or one live baby born every 9.9 seconds. The report, which appears in the "Hospital Number" of *The Journal of the AMA*, May 9, shows a continued increase in the volume of hospital service in the United States.

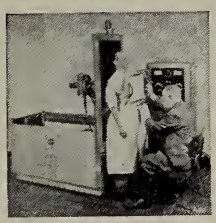
Highlights of the report: 6,665 hospitals registered—with 18,914,847 admissions, compared with 18,237,118 the previous year. Bed capacity statistics show an in-

(Continued on Page 674)

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*T.M.

(Continued from Page 672)

crease of 11,627 over 1951. Average length of stay of individual patients in governmental general hospitals is more than twice as long as in nongovernmental general hospitals—16.4 days as compared with 7.5 days.

* * *

The story of the "Michigan Heart"—one of the outstanding scientific advances of 1952—will be unfolded by F. D. Dodrill, M.D., Detroit, head of the medical engineering team responsible for its development, during the Student American Medical Association's 1953 annual convention. The meeting will be held June 15-17 at Chicago's Edgewater Beach Hotel.

Other convention features include panels on the "doctor draft" and "general practice" . . . sessions of the House of Delegates . . . a large technical exhibit for the first time. Abbott Laboratories of North Chicago will sponsor the traditional opening day party while the American Medical Association will honor new SAMA officers with a reception on the last afternoon.

All physicians residing in or visiting Chicago are cordially invited to attend.

* * *

The U. S. Circuit Court of Appeals, Second Circuit, New York, recently handed down a decision which is of considerable importance to the physician so far as federal income tax is concerned.

For a number of years, the AMA House of Delegates, the Board of Trustees and individual physicians have expressed concern over a ruling of the Commissioner of Internal Revenue that expenses incurred by a physician in pursuing postgraduate medical education were personal in nature and, therefore, not deductible for income tax purposes.

During the course of the study of this matter it was learned that there was pending before the U. S. Tax Court a case in which a lawyer, named Coughlin, had been denied the right to deduct expenses incurred by him in attending postgraduate courses on taxation. In view of the fact that the issue involved in the lawyer's case was quite similar to the issue in which medicine was interested, the AMA filed in that case a brief as amicus curiae. The Tax Court, however, held against the taxpayer, Coughlin, and an appeal was made to the U. S. Court of Appeals; the AMA again filed a brief.

Oral arguments in the case before the Appellate Court were heard on March 11, 1953. Last week—April 14—the court reversed the decision of the U. S. Tax Court, holding, in effect, that the lawyer could deduct, for federal income tax purposes, the expenses incurred by him in taking a postgraduate course dealing with taxation. An explanatory story of the doctor-implications in the Coughlin case will be prepared for publication in a forthcoming issue of the Journal of the AMA.

* * *

Melvin M. Figley, M.D., of the University of Michigan Medical School, is among twenty-one doctors of medicine appointed as the sixth group of Scholars in Medical Science by the John and Mary R. Markle

(Continued on Page 676)

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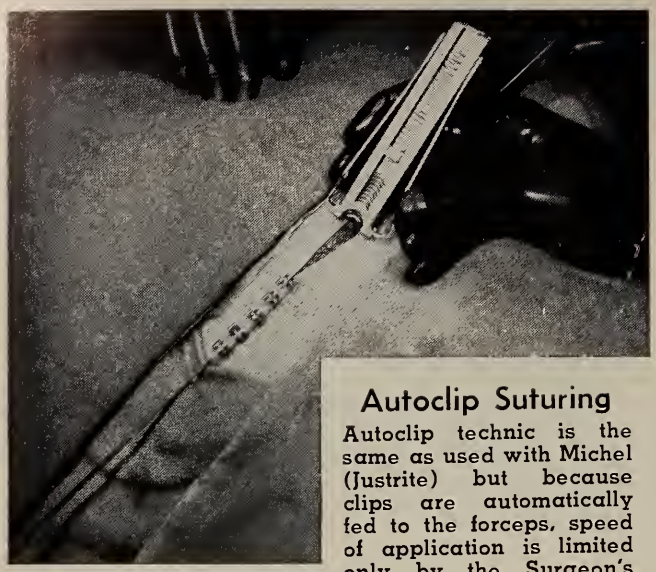
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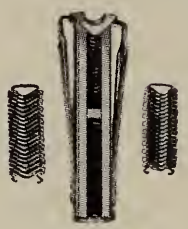
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(Continued from Page 674)

Foundation. Toward the support of these doctors and their research, the Foundation has appropriated $630,000, to be granted at the rate of $6,000 annually for five years. Dr. Figley's work will be in clinical radiology: cardiovascular system.

* * *

Wilfrid Haughey, M.D., Battle Creek, will be chairman of next year's Michigan Clinical Institute scheduled for the Sheraton-Cadillac Hotel, March 10-11-12, 1954.

* * *

Wm. J. Burns, Executive Director MSMS, acted as toastmaster at the Wayne University Medical Alumni Banquet, Fort Shelby Hotel, Detroit, on May 13. Mr. Burns also installed the new officers of the Michigan State Pharmaceutical Association at its annual meeting, Pantlind Hotel, Grand Rapids, May 19.

* * *

C. J. Stringer, M.D., Lansing, was appointed by President R. J. Hubbell as MSMS representative to attend the May 15 meeting of the Committee on Study of Nursing Needs in Michigan, a committee of the Michigan League for Nursing.

* * *

G. E. Anthony, M.D., Flint, chairman of the MSMS Child Welfare Committee, was appointed by President R. J. Hubbell to attend the Michigan Welfare League Conference on April 18.

C. C. Sturgis, M.D., Ann Arbor, recently was chosen president-elect of the American College of Physicians. Dr. Sturgis becomes president in April, 1954. Congratulations, Dr. Sturgis!

* * *

John M. Sheldon, M.D., Ann Arbor, was recently chosen president-elect of the American College of Allergists. Congratulations, Dr. Sheldon!

* * *

An Institute on Medical Testimony, for doctors of medicine who do not make that work a special field of endeavor, is being sponsored by the University of Michigan School of Public Health and will be held in Ann Arbor in October, 1953. Every MSMS member will receive an invitation to attend.

* * *

Officers of the Wayne County Academy of General Practice are: Arthur B. Levant, M.D., Detroit, president; Howard C. Rees, M.D., Detroit, vice president; A. Ray Marsh, M.D., Detroit, treasurer; and Lyle W. Korum, M.D., Detroit, secretary.

* * *

The Menominee Herald Leader of Menominee, Michigan, presented a detailed historical sketch in its March 1 publication of the Beaumont Memorial Restoration at Mackinac Island, as well as a history of Dr. William Beaumont and his pioneering works in physiology of the stomach.

(Continued on Page 678)



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Operating Room in Hospital	10.00	20.00	30.00	40.00
Anesthetic in Hospital	10.00	20.00	30.00	40.00
X-Ray in Hospital	10.00	20.00	30.00	40.00
Medicines in Hospital	10.00	20.00	30.00	40.00
Ambulance to or from Hospital	10.00	20.00	30.00	40.00
COSTS (Quarterly)				
Adult	2.50	5.00	7.50	10.00
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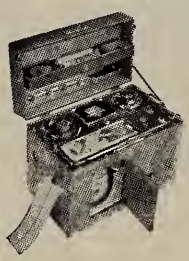
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Surgical Technic, Surgical Anatomy and Clinical Surgery, four weeks, starting August 3
Surgical Anatomy and Clinical Surgery, two weeks, starting June 15, August 17
Fractures and Traumatic Surgery, two weeks, starting June 15
Esophageal Surgery, one week, starting June 22
Breast and Thyroid Surgery, one week, starting June 22
Gallbladder Surgery, ten hours, starting June 29
Surgery of Colon and Rectum, one week, starting September 21
Basic Principles in General Surgery, two weeks, starting September 21
General Surgery, one week, starting October 5
General Surgery, two weeks, starting October 12
Thoracic Surgery, one week, starting October 12
GYNECOLOGY—Intensive Course, two weeks, starting June 15, September 21
Vaginal Approach to Pelvic Surgery, one week, starting August 31
OBSTETRICS—Intensive Course, two weeks, starting October 5
MEDICINE—Intensive General Course, two weeks, starting September 28
Electrocardiography and Heart Disease, two weeks, starting July 13
Allergy, one month and six months, by appointment
CYSTOSCOPY—Ten-day Practical Course starting every two weeks
UROLOGY—Intensive Course, two weeks, starting September 28

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(Continued from Page 676)

In its "Ye Town Crier" column, the *Leader* presented the story in paragraphs entitled "Science, the Memorial, Site, Changes, Remains (of the old Earley House), Shrine, Picture (by Dean Cornwell), and History of the Event."

Congratulations, *Menominee Herald Leader,* on a very complete story of Dr. Beaumont and the Beaumont Memorial, now being erected on Mackinac Island through the contributions of members of the Michigan State Medical Society!

* * *

C. Paul Hodgkinson, M.D., Detroit, has been elected secretary of the American Academy of Obstetrics and Gynecology. Congratulations, Dr. Hodgkinson!

* * *

Harrison S. Collisi, M.D., recently of Erie, Pennsylvania, has been named manager of Veterans Administration Tuberculosis Hospital at Livermore, California. Dr. Collisi practiced medicine in Grand Rapids, Michigan, for thirty years. After service in World War II, Dr. Collisi was appointed Chief of the General Medical Division of VA office in Columbus, Ohio; for four years to November, 1950, he was manager of the VA Hospital in Cleveland, after which he moved to the new VA Hospital in Erie, serving to the present date.

* * *

The National Fund for Medical Education may be granted a national charter. A bill (S. 1748) was introduced into the Senate on May 5 by Senator Robert A. Taft. Through this proposed legislation, the National Fund would be on the same footing as the American Red Cross and a few other agencies who enjoy the prestige of a Congressional Charter.

President Eisenhower recently stated—in a recent letter to S. Sloan Colt, president of the National Fund for Medical Education—that the financial crisis facing the nation's seventy-nine medical schools "poses a dangerous threat to our national welfare." President Eisenhower urged the support of the medical profession in industry.

* * *

Raymond Hussey, M.D., former Dean of the School of Occupational Health, Wayne University, Detroit, died on April 15 in Chicago. For the past three years, Dr. Hussey was Scientific Director of the AMA Council on Industrial Health. During World War II, Dr. Hussey was Director of the Army Industrial Hygiene Laboratories at Baltimore. He is survived by a widow and a brother. Burial took place in Baltimore.

* * *

The National Gastroenterological Association announces that its Fifth Annual Course in Postgraduate Gastroenterology will be given at the Hotel Biltmore in Los Angeles, California, on October 15, 16, 17, 1953.

The course will again be under the direction and co-chairmanship of Dr. Owen H. Wangensteen, Professor of Surgery of the University of Minnesota Medical School, who will serve as surgical co-ordinator and Dr.

(Continued on Page 680)

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Isidore Snapper, Director of Medical Education, Cook County Hospital, Chicago, Illinois, who will serve as medical co-ordinator.

For further information and enrollment, write to the National Gastroenterological Association, Department GSJ, 1819 Broadway, New York 23, N. Y.

* * *

William John Stapleton, Jr., M.D., of Detroit, emeritus professor of Jurisprudence, Ethics and Economics and Medical History at the Wayne University College of Medicine, was honored at the Wayne University Alumni Reunion held Saturday, May 9, in Detroit, when he was presented an Alumni Award for outstanding service and achievement by Dr. Clarence B. Hilberry, acting president of Wayne University, during the eighty-fifth anniversary of the founding of Wayne.

Dr. Stapleton received his Ph.D. degree in 1902 from the Detroit College of Medicine, parent institution of Wayne's College of Medicine. His other degrees include the M.D. from the Michigan College of Medicine in 1900 and the LL.B. from the Detroit College of Law in 1907.

He is still actively engaged in medical practice and conducts "By the Way" column for the *Detroit Medical News,* in addition to editing the series "100 Books for the Doctor" also appearing in the *Medical News.*

Dr. Stapleton has made many contributions to his field. He was associate dean of Wayne's College of Medicine for ten years and acting dean for two years, He has worked in the field of medical jurisprudence and legal medicine since 1907.

His Wayne alumni service includes that of historian of the Wayne University College of Medicine Alumni Association and membership on the Board of Trustees, Wayne University Medical Library Fund, Inc.

He is a member of numerous professional societies and fraternities.

* * *

Practical Nurse Training Program Studied.—A comprehensive study of the Practical Nurse Training Program has been announced by Dr. Lee M. Thurston, State Superintendent of Public Instruction. The study, suggested by the State Advisory Committee for Practical Nurse Education, is the result of co-operation among the W. K. Kellogg Foundation, the University of Chicago, and the Michigan Department of Public Instruction, as well as other individuals and agencies.

Goals for the project include the determination of strengths and weaknesses, the development of suggestions for program improvement, the organization of criteria for evaluation on a continuing basis, and the provision of a basis for studying programs in other states. Findings of the study, as well as the evaluation techniques, will be made available to other states which have similar programs.

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The study will confine itself to the operation of the Michigan Practical Nurse Training Program during the last five years. Schools of practical nurse training in eight communities will be involved. These include Ann Arbor, Battle Creek, Detroit, Flint, Grand Rapids, Lansing, Marquette, and Traverse City.

* * *

Hearing in Osteopathic Case.—The Supreme Court of Appeals docketed for hearing on Tuesday, April 28, the osteopathic case appealed from the Circuit Court of Wyoming County (W. Va.). Briefs were heard at that time.

The proceeding was instituted by the members of the Medical Licensing Board and a group of Wyoming County physicians who contend that an osteopathic physician is practicing medicine and surgery in that county in violation of the law.

The suit was instituted following an opinion of the Attorney General, handed down in 1951, in which it was held that osteopathic physicians and surgeons, under the laws of West Virginia, are entitled to the same rights and privileges in the treatment of cases "only to the extent that their treatment remains within the field of osteopathy."

In October, 1952, an opinion was handed down by the judge of the Wyoming County circuit court to the effect that medical doctors and osteopathic physicians are in two separate and distinct professions and that osteopathic physicians have the same rights in the practice of osteopathy as physicians and surgeons have in the practice of their profession.

The case was appealed to the Supreme Court of Appeals and briefs filed in December, 1952.—*West Virginia Medical Journal,* May 1953.

* * *

Kenneth B. Babcock, M.D., Detroit, Director of Grace Hospital, was named to serve on the national Blue Cross Commission as one of the three representatives of the American Hospital Association, at the Blue Cross Conference held at Hollywood, Florida, April 16.

* * *

"**Careers for Maturing Workers**" is the theme of the University of Michigan Sixth Annual Conference on Aging to be held in Ann Arbor, July 8-10, 1953.

The problems associated with earning in the later years and with methods for creating new opportunities for remunerative activity by aging people are particularly pressing at this time because of the steadily increasing number of older workers cut off from earning opportunities.

Discussion sections led by nationally known experts will consider, among other facets of the problem: The maturing worker from the standpoint of health; counseling, guidance, placement and training of the maturing worker; continuing employment in business and indus-

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For further information about the program, write to: Dr. Wilma Donahue, Chairman, 1510 Rackham Building, Ann Arbor, Michigan.

* * *

The Orthopedic Frame Company, of Kalamazoo, is sponsor of a new scholarship in industrial arts at Western Michigan College, according to Harry Treace, general manager of the Company. Homer H. Stryker, M.D., Kalamazoo, is president of the Orthopedic Frame Company.

Graduating seniors from all Michigan high schools will be eligible to compete in the scholarship which will first be awarded to an entering freshman in the fall of 1953. The scholarship has a value of $500.

* * *

The thirty-first annual clinical session of the American Congress of Physical Medicine and Rehabilitation will be held on August 31, September 1, 2, 3 and 4, 1953, inclusive, at the Palmer House, Chicago, Illinois.

In addition to scientific sessions, annual instruction seminars will be held. These lectures will be open to physicians as well as to therapists, who are registered with the American Registry of Physical Therapists or the American Occupational Therapy Association.

Full information may be obtained by writing to the executive offices, American Congress of Physical Medicine and Rehabilitation, 30 North Michigan Avenue, Chicago 2, Illinois.

* * *

Michigan Doctors of Medicine who attended the American Academy of General Practice Assembly in St. Louis, Missouri, March 23-26, 1953, are:

Arnold O. Abraham, M.D., Hudson; Herbert C. Allison, M.D., Grosse Pointe; Robyn J. Arrington, M.D., Detroit.

Charles W. Balser, M.D., Detroit; S. A. Beckwith, M.D., Stockbridge; W. R. Birk, M.D., Hastings; Arthur Boddie, M.D., Detroit; H. C. Bodmer, M.D., Kalamazoo; Charles W. Brooks, M.D., Detroit; Wm. W. Bruce, M.D., Swartz Creek, Lawrence H. Butler, M.D., Detroit.

Hector M. Chabut, M.D., Jackson; Henry G. Chall, M.D., Detroit; Horace R. Cobb, M.D., Kalamazoo; McClellan B. Conover, M.D., Flint; C. A. Cooper, M.D., Stambaugh; Schuyler O. Cotton, M.D., Detroit.

Luther W. Day, M.D., Jonesville; J. S. DeTar, M.D., Milan; Harold Drinkhaus, M.D., Detroit.

Arvid W. Erickson, M.D., Ishpeming.

G. R. Fattic, Jr., M.D., Niles; Edwin H. Fenton, M.D., Detroit; Russell F. Fenton, M.D., Detroit; M. J. Franjac, M.D., Detroit.

P. C. Gittins, M.D., Detroit; Lolita Goodhue, M.D., Kalamazoo; John B. Greene, M.D., Detroit.

Harold H. Harris, M.D., Detroit; Wm. H. Harrison, M.D., Lansing; G. Lee Hileman, M.D., Encorse; W. E. Hoffer, M.D., Charlotte; Clare C. Huggett, M.D., Lansing.

E. B. Johnson, M.D., Allegan.

Morris Kazdan, M.D., Allen Park; S. N. Kelso, Jr., M.D., Monroe; G. L. Kemme, M.D., Zeeland; Howard J. Kerr, M.D., Muskegon; John H. Kitchel, M.D., Grand Haven; F. S. Kucmierz, M.D., Detroit.

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Augusta Marchler, M.D., Detroit; L. L. Marston, M.D., Lakeview; Kenneth M. McColl, M.D., Grosse Pte. Woods; A. J. McGregor, M.D., Brighton; H. L. Morris, M.D., Novi; Edward C. Mosier, M.D., Otisville.

John Norup, M.D., Berkley.

Earl E. Parker, M.D., Leslie; Harry Jay Prall, M.D., Lansing.

Russell Ragan, M.D., Flint; H. C. Rees, M.D., Detroit; Wm. F. Reus, M.D., Grand Rapids; F. P. Rhoades, M.D., Detroit; C. J. Richards, M.D., Durand; Howard Robinson, M.D., Detroit; Donald G. Ross, M.D., Grosse Pointe; Hyman Ross, M.D., Detroit.

G. E. Sands, M.D., Detroit; R. H. Schaftenaar, M.D., Holland; Clare A. Scheurer, M.D., Pigeon; John H. Schlemer, M.D., Detroit; R. E. Sculley, M.D., Grand Rapids; Geo. W. Sippola, M.D., Detroit; Milton E. Slagh, M.D., Saranac; A. V. Smith, M.D., Mason; Maurice J. Smith, M.D., Flint; A. C. Stander, M.D., Saginaw; H. D. Stricker, M.D., Detroit; Karl L. Swift, M.D., Detroit.

Thomas A. Tenaglia, M.D., Detroit; Elmer C. Texter, M.D., Detroit; Hugh O. Thompson, M.D., Detroit.

J. Van Dellen, M.D., East Jordan.

Arch Walls, M.D., Detroit; David Reinfred Wark, M.D., Flint; K. N. Wells, M.D., Spring Lake; Wm. G. Winter, M.D., Holland.

J. P. Yegge, M.D., Kent City.

* * *

Postgraduate Course in Hematologic Diagnosis.—A course in hematologic diagnosis for graduate physicians will be given at the Michael Reese Hospital by Karl Singer, M.D., Director, Department of Hematologic Research, Medical Institute, July 20 to August 1, 1953, full time. The course gives a review of the present trends in hematology as well as instruction in actual reading of slides, normal and pathologic specimens, peripheral blood and bone marrow. An individual slide collection is provided and may be retained by the participants. A demonstration of all immuno-hematologic as well as of the modern tests for disturbances of the clotting mechanisms is scheduled.

Further information and a copy of the curriculum may be obtained from the Department of Hematologic Research, Medical Research Institute, Michael Reese Hospital, Chicago, Illinois.

* * *

Russ V. Oosting of the Medical Arts Surgical Supply Company, Grand Rapids, is president of the Michigan State Pharmaceutical Association. Mr. Oosting has been a long-time exhibitor at annual sessions of the Michigan State Medical Society and has a host of medical friends throughout this state.

Congratulations, Russ, and sincere wishes for a successful presidential year!

* * *

Gariety Sponsors Cancer Trip.—Twenty-five Michigan men, including nine Doctors of Medicine from Lansing, Flint, Saginaw, Bay City, Jackson, Battle Creek, and Detroit, visited the Memorial Center for Cancer and Allied Diseases in New York City as the guest of James A. Gariety, Jr., president of the Gariety-Michigan Corporation, of Adrian.

The trip to New York City on April 23 was arranged by Mr. Gariety to allow the Michigan men to view the

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latest advances in cancer diagnosis, treatment, palliation, cure, prevention and research. The laymen had been, or are presently, associated with lay cancer work in their respective communities. The M.D.s long have been identified with cancer treatment.



More than one-third of the patients discharged to their homes from Michigan tuberculosis hospitals and sanatoriums are patients leaving against medical advice—most of them with their disease uncontrolled. These patients not only endanger their own lives, they are a possible source of tuberculosis infection in their homes and communities—a contributing factor in the continuing high tuberculosis case load.

In this complex problem there is a challenge and responsibility for the general medical practitioner as well as for the tuberculosis specialist, the public health worker and the social worker.

—MICHIGAN TUBERCULOSIS ASSOCIATION

CORTISONE AND PREGNANCY

(Continued from Page 617)

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THE DOCTOR'S LIBRARY

Acknowledgment of all books received will be made in this column, and this will be deemed by us as full compensation to those sending them. A selection will be made for review, as expedient.

A FORTY-YEAR CAMPAIGN AGAINST TUBERCULOSIS. By Louis I. Dublin, Ph.D., Second Vice President and Statistician. New York: Metropolitan Life Insurance Co., 1952.

This monograph traces the campaign against tuberculosis over the past forty years and chronicles the part played by the Metropolitan Life Insurance Company in the battle against this disease. An excellent bibliography is appended. The monograph is primarily of interest from the public health standpoint.

R.W.B.

TREATMENT OF MENTAL DISORDER. By Leo Alexander, M.D. Director, The Neurobiological Unit, Division of Psychiatric Research, Boston State Hospital, and Instructor in Psychiatry, Tufts Medical School. Illustrated. Philadelphia: W. B. Saunders Co., 1953. Price, $10.00.

This textbook has been written, apparently, on the author's theory that there should be less rigidity in the classification of patients and their illness. He believes that the important criteria is where the patient stands in the battle against his disease and what sort of help he needs. He bases the need for electro-shock therapy on the findings of the Funkenstein test. His entire theory of mental illness is that it is a psychosomatic disturbance of the nervous system.

This therapy includes the entire gamut of various treatments that are in current use. In collaboration with several equipment companies there are several chapters on electrical currents, techniques and neurophysical aspects of physical treatment. Chemical, hormonal and psychotherapy are covered with indications and directions for use.

All necessary material has been included in this book, and is well presented. The only criticism that appears warranted is that some of this material seems a little hard to find, but if one searches it is all there. It is a worthwhile book.

G.K.S.

SYNOPSIS OF PATHOLOGY. By W. A. D. Anderson, M.A., M.D., F.A.C.P., Professor of Pathology, Marquette University School of Medicine; Pathologist, St. Joseph's Hospital, Milwaukee, Wisconsin. With 334 text illustrations and 13 color plates. Third Edition. St. Louis: The C. V. Mosby Co., 1952. Price $8.00.

This volume is a true synopsis in the sense that important topics are often summed up in a few sentences. Apparently, however, the author omits very little that is important in contemporary pathology, and the book should be recommended to those physicians preparing for various types of examination in other fields who wish to review the subject.

The bibliography following the various chapters is current and exhaustive, enabling one to employ this as



a source book and expand the abbreviated topic. The portion devoted to Gynecology and Ovarian Tumors is particularly good. The discussion on Viral and Rickettsial diseases is also outstanding and is presented in a more detailed form than most of the material in the book.

If the prospective purchaser expects more than a synopsis, he should be assured that it is just that, and nothing further. If he wishes a more extensive review of pathology, the very excellent large volume edited by the same author is highly recommended. A.A.H.

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OPERATIVE GYNECOLOGY. By Richard W. Te Linde, Professor of Gynecology, Johns Hopkins University, and Chief Gynecologist, Johns Hopkins Hospital. 409 figures and 7 color plates. Second Edition. Philadelphia: J. B. Lippincott Co., 1953. Price $20.00.

This is the most complete work on the subject of operative gynecology we have had the pleasure to own. It is written primarily for the resident who intends to specialize in gynecology. The subject matter is extremely well presented, and treatment of the conditions reviewed is definitive. There are sections on the branches of abdominal surgery and urological conditions that the gynecologist might be required to treat. Many phases of office practice are emphasized in this work. Many of the conditions described have never previously been so adequately considered. We feel this is a text that everyone doing operative gynecology will be pleased to own.

R.J.C.

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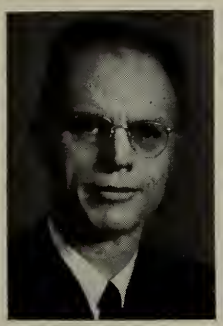
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Ben H. Senturia, M.D.



B. B. Stamell, M.D.

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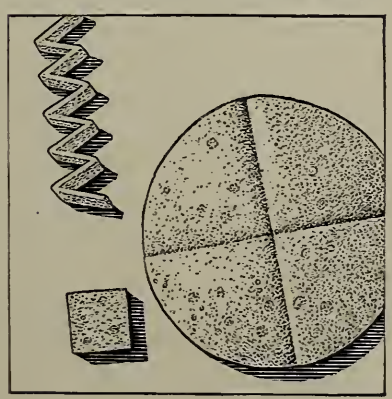
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AMA Annual Session - June 1953

The annual session of the American Medical Association was held in New York, New York, June 1, 2, 3, 4, 5, 1953. As usual the session was preceded by many other national and other types of medical meetings. One of the most impressive was the Ninth Annual Conference of Presidents and other officers of State Medical Societies. This conference was first organized by Andrew S. Brunk, M.D., of Michigan. Dr. Louis M. Orr, of Orlando, Florida, in his inaugural, urged medical societies to continue, and accelerate, the expansion of the medical profession's many constructive programs now under way to make good medical care available to all the American people. Speakers were the Rev. Frank W. Price, Chinese missionary; Senator John Marshall Butler, of Maryland, who spoke on "the Constitution and the Treaty-Making Powers."

The first action of the House of Delegates in session was the selection of the winner of the Distinguished Service Award, Alfred Blalock, M.D., of Baltimore, for his outstanding work in vascular surgery.

In a brief appearance Mrs. Oveta Culp Hobby said universal medical care provided by the government not only threatens the democratic principle, but is uneconomic and inherently self-defeating.



Hard at work in the AMA House of Delegates, meeting June 1–4 in New York City, are members of the MSMS delegation. Front row (left to right), Delegates: J. S. DeTar, M.D., Milan; W. D. Barrett, M.D., Detroit; Wm. A. Hyland, M.D. (Chr.), Grand Rapids; R. L. Novy, M.D., Detroit; R. A. Johnson, M.D., Detroit; W. H. Huron, M.D., Iron Mountain; G. C. Penberthy, M.D., Detroit. Second row (left to right), Alternate Delegates: G. W. Slagle, M.D., Battle Creek; E. C. Texter, M.D., Detroit; C. I. Owen, M.D., Detroit; E. F. Sladek, M.D., Traverse City; E. D. Spalding, M.D., Detroit. Not present on this occasion was Alternate Delegate W. W. Babcock, M.D., Detroit. In center background behind delegation can be seen R. J. Hubbell, M.D., Kalamazoo, MSMS President, and Wilfrid Haughey, M.D., Battle Creek, Editor, THE JOURNAL, MSMS.

Mrs. Hobby, Secretary of the Department of Health, Education and Welfare, expressed the need for a "close partnership between the government, the people and the medical profession" to achieve a better health care for the people of the United States. Mrs. Hobby hailed the splendid medical care now provided under a private voluntary medical system, but pointed out that every advance brings its own problems.

"The changing medical practice and a changing society have presented us with an embarrassing

(Continued on Page 696)

Meat and its applicability in the Dietary Management of Atherosclerosis

Contrary to the former belief that serum cholesterol levels are primarily related to ingested animal fat and consequently to dietary cholesterol, it now appears that the total amount of fat in the diet, not its source or cholesterol content, is a more important factor in determining the blood cholesterol concentration.[1,2,3,4] Clinical observation has shown that ingestion of vegetable fat—which contains no cholesterol—will, like fats of animal origin, raise the serum cholesterol level.[3,5]

Recent basic research on the influence of fats and cholesterol on human health has done much to further progress in the fight against atherosclerosis. It will serve well in dispelling the mistaken fear that reasonable amounts of foods of animal origin predispose the individual to this vascular disease.[6] As a matter of fact, a dietary inadequate in essential nutrients but providing too many calories and too much fat from *any* source may well be an important factor underlying the deposition of fat and cholesterol in the arteries and liver.

Cumulative evidence indicates that lowered blood levels of cholesterol may be effected by restricting the total fat intake.[1] Except in instances of refractory hypercholesteremia, in which a daily fat intake as low as 10 Gm. may not reduce cholesterol levels to normal, diets containing 20 to 30 Gm. of fat, or even more, often produce low cholesterol blood levels. In the clinical application of this principle, various palatable, low fat diets which supply three servings of meat daily (containing 18 Gm. of fat) have recently been suggested for the dietary management of arteriosclerosis and for enlisting the cooperation of patients.[1] The meat servings were chosen from a large variety of cuts and kinds of meat (fat trimmed off, as lean as possible). Meat adds to the eating appeal of the fat-restricted diet and contributes important amounts of biologically complete protein, the B group of vitamins including B_{12}, and food iron—all of which are important for a good state of nutrition in the atherosclerotic patient.

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2. Bloch, K.: The Intermediary Metabolism of Cholesterol, Circulation 1:214 (Feb.) 1950.
3. Keys, A.; Mickelson, O.; Miller, E.V.O., and Chapman, L.B.: The Relation in Man Between Cholesterol Levels in the Diet and in the Blood, Science 112:79, 1950.
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5. Hildreth, E.A.; Mellinkoff, S.M.; Blair, G.W., and Hildreth, D.M.: The Effect of Vegetable Fat Ingestion on Human Serum Cholesterol Concentration, Circulation 3:641 (May) 1951.
6. King, C.G.: Trends in the Science of Food and Its Relation to Life and Health, Nutrition Rev. 10:1 (Jan.) 1952.

The Seal of Acceptance denotes that the nutritional statements made in this advertisement are acceptable to the Council on Foods and Nutrition of the American Medical Association.

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(Continued from Page 694)

number of what are paradoxically problems of progress," she said. "There is little controversy on our objective—the best medical care possible for the people. It is the means to this end which raise the problems we face in achieving this purpose."

The House of Delegates unanimously adopted a recommendation of its Reference Committee on Insurance and Medical Services that, except in cases involving tuberculosis or psychiatric or neurologic disorders, responsibility for the care of veterans with disabilities or diseases of non-service-connected origin should be returned to the individual and to the local community.

In taking this action the House of Delegates adopted the same recommendations which were presented and deferred last December in Denver by a special committee on federal medical services appointed the previous year by the board of trustees.

In defining the basic question involved the committee expressed the belief that "the medical profession must concern itself, not with the number of 'chiselers' in Veterans Administration hospitals nor with the efficacy of the Veterans Administration in the administration of enabling legislation, but rather with the broad question of whether such legislation is sound, whether the federal government should continue to engage in a gigantic medical care program in competition with private medical institutions and whether the ever-increasing cost of such a program is a proper burden to impose on the taxpayers of the country."

In conclusion the committee stressed the fact that it was raising no question concerning the present program of hospitalization and medical care for veterans with service-connected disabilities. The committee and the House restated their hearty endorsement of this program.

During the House of Delegates meeting, Wednesday, June 3, Dr. Robert L. Novy, President of Michigan Medical Service, and Vice President of the National Blue Shield, introduced the 26,000,000th member of the Blue Shield. He is William P. Marcum, of Louisville, Kentucky, who was flown to New York for the occasion. On June 9, he was to be honored in his own state by a dinner.

The House reaffirmed its approval of Senate Joint Resolution number one providing that treaties or executive agreements may not supercede the constitution or the laws of the nation or states. That condition now prevails.



E. J. McCormick, M.D.

Edward J. McCormick, M.D., President-elect, in his address to the House outlined ten principles for his plan for Medical Care. His inaugural address was a masterpiece, and was broadcast to the nation. Cardinal Spellman gave the invocation at the inaugural meeting of the House.

Walter B. Martin, M.D., of Norfolk, Virginia, a member of the Board of Trustees was elected President-elect, and Julien P. Price, M.D., of Florence, South Carolina, editor of the South Carolina *Journal,* to the unexpired term on the AMA Board of Trustees.

The attendance exceeded anything in history; 17,958 Doctors of Medicine were registered, with 31,022 guests, exhibitors, et cetera.

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The makers of Camels never cease their efforts to maintain and to improve the standards of quality that distinguish America's most popular cigarette.

The plant shown above, which was opened this year, is a $2,000,000 addition to Camel's research facilities.



R. J. REYNOLDS TOBACCO COMPANY • WINSTON-SALEM • N. C.

You and Your Business

MICHIGAN STATE MEDICAL SOCIETY ANNUAL SESSION
Pantlind Hotel-Civic Auditorium, Grand Rapids
Wednesday-Thursday-Friday, September 23-24-25, 1953
YOU ARE URGED TO ATTEND!

TWENTY-SEVEN GUEST SPEAKERS FOR ANNUAL SESSION

The Michigan State Medical Society Annual Session will be a gathering of some 3,000 medical folk at the Pantlind Hotel-Civic Auditorium, Grand Rapids, September 23-24-25, 1953. No registration fee is charged to MSMS members who are urged to secure their reservations now by writing L. E. Ames, Secretary, Committee on Hotels, c/o Pantlind Hotel, Grand Rapids.

Twenty-eight guest essayists, from all parts of the United States, will be presented on the 1953 program, including: U. S. Senator Homer Ferguson, Washington, D. C.; AMA President Edward J. McCormick, M.D., Toledo; J. A. Bargen, M.D., Rochester, Minn.; Allan C. Barnes, M.D., Cleveland, Ohio; William L. Benedict, M.D., Rochester, Minn.; Paul R. Cannon, M.D., Chicago, Ill.; John G. Downing, M.D., Boston, Mass.; O. Spurgeon English, M.D., Philadelphia, Pa.; Everett I. Evans, M.D., Richmond, Va.; David P. Findley, M.D., Omaha, Neb.; Arthur T. Hertig, M.D., Boston, Mass.; Frank Hinman, Jr., M.D., San Francisco; Blair Holcomb, M.D., Portland, Ore.; Wm. D. Holden, M.D., Cleveland, Ohio; Chevalier L. Jackson, M.D., Philadelphia, Pa.; Julian Johnson, M.D., Philadelphia, Pa.; Norman M. Keith, M.D. Rochester, Minn.; John W. Knutson, D.D.S., Washington, D. C.; Louis A. M. Krause, M.D., Baltimore, Maryland; Walter G. Maddock, M.D., Chicago, Ill.; Harold J. Magnuson, M.D., Chapel Hill, N. Carolina; Michael L. Mason, M.D., Chicago, Ill.; Victor A. Najjar, M.D., Baltimore, Md.; Leo G. Rigler, M.D., Minneapolis, Minn.; Harrison Sadler, M.D., Grosse Pointe Farms; George E. Shambaugh, Jr., M.D., Chicago, Ill.; Leo M. Taran, M.D., Roslyn, N. Y.; and Henry Welch, Ph.D., Washington, D. C.

The Presidents, Secretaries and Executive Secretaries of neighboring state medical societies and of the Ontario Medical Association also are being invited to the 88th Annual Session of the Michigan State Medical Society.

TEMPORARY LICENSURE

Following is an explanation of the two types of temporary licensure issued by the Michigan Board of Registration in Medicine and the credentials needed for each:

Temporary Licensure for Postgraduate Work in an Approved Training Hospital—This temporary license was made possible by Senate Bill No. 301 which, when passed by the Michigan Legislature in 1952 and signed by the Governor, became Public Act No. 172 of 1952.

Temporary licensure for postgraduate work in an approved training hospital may be issued to applicants with the following credentials:

1. Graduation from an approved class-A medical school in the United States or Canada.
2. Certification of an approved internship served in the United States or Canada.
3. For foreign graduates—fulfillment of extra educational credentials as per the Rules and Regulations, Paragraph H, and a certified approved internship in the United States or Canada.

All trainees, which includes interns, assistant and resident physicians are exempt from the basic science certificate requirement by the basic science law which states, ". . . this act shall not be construed as applying to interns and residents who are training in Michigan hospitals."

Temporary Licensure for Private Practice—Doctors holding this license enjoy all the privileges of a fully licensed doctor of medicine with permanent Michigan license. The requirements are the same as itemized above for the temporary license for postgraduate work plus the following:

1. Basic science certificate, unless exempt.
2. Completed Endorsement Application with $100 fee on file in our office, or successful Michigan licensure examination with fee, $50.

(Since these applicants are no longer trainees, they are not exempt from the basic science requirement.)

Temporary licensure, both for postgraduate work and private practice is to be issued for a period not to exceed five years and must be renewed annually at $10 per annum.

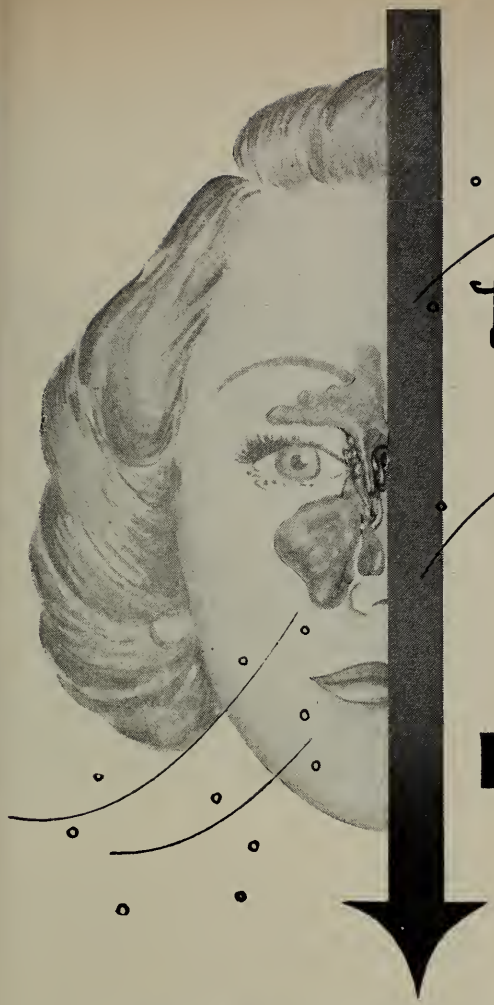
Temporary license for private practice was made possible by Senate Bill No. 1261, of 1953, *but is limited* by the bill to *Canadian citizens* with Canadian credentials or *DP doctors* who entered the United States under the DP act of 1948 and have resided in Michigan since January 1, 1952.

MICHIGAN STATE BOARD OF
May 25, 1953 REGISTRATION IN MEDICINE

HIGHLIGHTS OF EXECUTIVE COMMITTEE OF THE COUNCIL May 20, 1953

Seventy-four items were presented to the Executive Committee of The Council on May 20. Chief in importance were:

(Continued on Page 700)



To open congested air passages in hay fever

NEO-SYNEPHRINE®

HYDROCHLORIDE

. . . reduces nasal engorgement . . .

. . . promotes aeration . . . encourages drainage

A few drops of Neo-Synephrine 0.25% in each nostril will promptly check mucosal engorgement and hypersecretion, promoting greater breathing comfort over a period of several hours.

The resultant relief to the hay fever sufferer is decidedly gratifying. Prolonged action of Neo-Synephrine makes fewer applications necessary, consequently longer periods of rest and sleep are possible.

Neo-Synephrine does not lose its effectiveness on repeated application and may, therefore, be relied upon to give relief throughout the hay fever season.

Neo-Synephrine is practically free from sting and compensatory congestion; does not appreciably inhibit ciliary activity. Neo-Synephrine has been found relatively free from systemic side effects such as nervous excitation, cardiac reaction or insomnia even when tested on hypertensive, cardiac and hyperthyroid patients.[1]

Supplied in 0.25% solution (plain), bottles of 1 oz., 4 oz. and 16 oz.; 0.25% solution (aromatic), bottles of 1 oz. and 16 oz.; 0.5% solution, bottles of 1 oz.; 1% solution, bottles of 1 oz., 4 oz. and 16 oz.; 0.125 (⅛)% solution, bottles of ½ oz.; 0.5% water soluble jelly, in ⅝ oz. tubes.

1. Van Alyea, O. E., and Donnelly, Allen: *Arch. Otolaryng.*, 49:234, Feb., 1949.

Winthrop-Stearns INC.
NEW YORK 18, N. Y. WINDSOR, ONT.

Neo-Synephrine, trademark reg. U.S. & Canada, brand of phenylephrine.

HIGHLIGHTS OF THE COUNCIL

(Continued from Page 698)

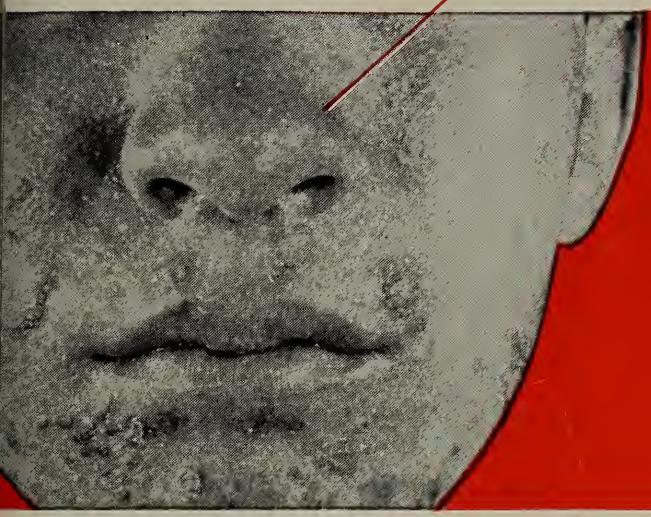
- *Beaumont Memorial Restoration.*—The following matters were considered: (a) cornerstone laying is scheduled for Friday, July 17, 1953, at 3:00 p.m., Mackinac Island, with a simple ceremony; (b) the Beaumont Memorial Working Committee, W. S. Jones, M.D., Chairman, will meet to inspect progress on the new museum on Saturday, July 18; (c) Report was made that state-wide, approximately 35 per cent of MSMS members have contributed to the Beaumont Memorial but only 17 per cent (384 members) in Wayne County have donated to the Memorial, to date. The Beaumont Memorial Committee was requested to continue the solicitation of funds, until assured that sufficient monies to erect the building and to secure the property surrounding the Beaumont Memorial have been secured; more than just the cost of erecting the building is needed to insure proper landscaping and perspective of this beautiful Memorial.
- *Remodeling* of the porch and reception room of the MSMS home at 606 Townsend, Lansing, was authorized.
- *Committee Reports.*—The following were given consideration: (a) Permanent Conference Committee, meeting of April 22; (b) Advisory Committee to National Foundation for Infantile Paralysis, April 22; (c) Child Welfare Committee, April 29; (d) Cancer Control, April 30; (e) Rural Medical Service, April 30; (f) Medical Advisory Committee to Michigan Hospital Service, April 30; (g) Committee on Scientific Work, May 6. Also presented were the minutes of the Board of Michigan State Medical Assistants Society, meeting of May 19.
- *President-Elect Hull* reported that the Genesee County Medical Society Cancer Conference of April 8 was a very successful and informative scientific session. A congratulatory letter was authorized to be sent to the Genesee County Medical Society and to the sponsor of its Cancer Conference, Mr. Donald E. Johnson, Flint, member of the Board of Directors of the American Cancer Society.
- *Special Invitations to MSMS Annual Session.*—The Executive Committee of The Council authorized the processing of special invitations to Presidents, Secretaries and Executive Secretaries of neighboring state medical societies and of the Ontario Medical Association to all MSMS Annual Sessions in future.
- *President R. J. Hubbell, M.D.,* reported that U. S. Senator Homer Ferguson had accepted invitation to present the Biddle Lecture in Grand Rapids on Thursday, September 23, 1953, Black and Silver Ballroom, Civic Auditorium, G. R.
- *Invitation to nominate a Michigan physician* for Award during President's Committee on Nationally Employ the Physically Handicapped Week, was referred to the Michigan Industrial Medical Association, for recommendations.
- *Health and Accident Insurance Studies.*—Letter from the Wayne County Medical Society Insurance Studies Committee, recommending a joint meeting with the MSMS Committee on Group Health and Accident Insurance Studies, was referred to the latter committee.
- *Congratulatory letter to the General Electric Company* on its excellent advertisements to the laity, in connection with its x-ray department, was authorized.
- *Report of J. S. DeTar, M.D.,* Milan, on the Conference on Financing Hospital Care, Chicago, April 24-25, was accepted with thanks.
- *C. Allen Payne, M.D.,* Grand Rapids, was appointed Chairman of the Scientific Exhibit for MSMS Annual Session, September 23-24-25, 1953, in Grand Rapids.

  Chairmen of Annual Session Assemblies were appointed as follows: W. A. Hyland, M.D., Grand Rapids, H. H. Hiscock, M.D., Flint, R. J. Hubbell, M.D., Kalamazoo, J. E. Livesay, M.D., Flint, F. H. Drummond, M.D., Kawkawlin, J. D. Miller, M.D., Grand Rapids. Secretaries of Assemblies: J. M. Wellman, M.D., Lansing, L. L. Loder, M.D., Muskegon, L. Fernald Foster, M.D., Bay City, C. J. Williams, M.D., Grosse Pointe, J. P. Ottaway, M.D., Detroit, F. A. Lamberson, M.D., Detroit, and M. G. Butler, M.D., Saginaw.

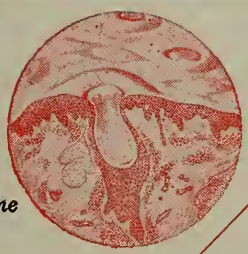
  Discussion Conference Leaders: R. W. Buxton, M.D., Ann Arbor, on Wednesday; Arch Walls, M.D., Detroit, on Thursday, and A. A. Humphrey, M.D., Battle Creek, on Friday.
- *1954 Michigan Clinical Institute.*—Annual Heart Day (Friday morning, March 12, 1954) will include a scientific program arranged by the Michigan Heart Association; the Executive Committee of The Council accepted with thanks the invitation of the M.H.A. in this regard.
- *The Annual County Secretaries-Public Relations Conference* is to be held at the Sheraton-Cadillac Hotel, Detroit, January 31, 1954.
- *The usual financial help* in sending representatives of the Student American Medical Association at the University of Michigan and at Wayne University, to attend the SAMA convention in Chicago in June, 1953, was authorized.
- *Publicity in JMSMS and in Secretary's Letter* to all members on practical nurse program sponsored by the Michigan Department of Public Instruction was approved.
- *Social Security.*—A poll, asking MSMS members if they desire Social Security for themselves, was authorized to be inserted in the next Secretary's Letter to All Members; from this infor-

(Continued on Page 702)


impetigo

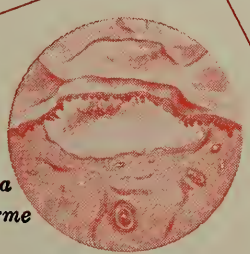


skin infections and antibiotics


acne


pyoderma


folliculitis


erythema multiforme

Since cutaneous bacterial infections "probably account for more disability than any other group of skin diseases,"[1] the availability of broad-spectrum Terramycin has been particularly helpful in controlling these common disorders. This pure, well-tolerated antibiotic is markedly effective against the wide range of organisms often implicated as primary or secondary pathogens in skin disease. Successful clinical experience[2,3,4] in the treatment of impetigo, acne, pyodermas, erythema multiforme and other cutaneous infections recommends the selection of Terramycin as an agent of choice in common diseases of the skin. Terramycin is supplied in convenient oral and intravenous dosage forms.

1. *Bednar, G. A.: South. M. J. 46:298 (March) 1953.*
2. *Wright, C. S. et al.: A. M. A. Arch. Dermat. & Syph. 67:125 (Feb.) 1953.*
3. *Robinson, H. M. et al.: South. M. J. (in press).*
4. *Andrews, G. C. et al.: J. A. M. A. 146:1107 (July 21) 1951.*

Terramycin

BRAND OF OXYTETRACYCLINE

Pfizer

CHAS. PFIZER & CO., INC.
Brooklyn 6, N. Y.

HIGHLIGHTS OF THE COUNCIL

(Continued from Page 700)

mation, the MSMS House of Delegates and The Council will be properly guided when action on this subject is necessary.

- *Report of J. E. Livesay, M.D.*, Flint, on proposed x-ray radiation course to be held at Michigan State College, East Lansing, June 29-30, 1953, was presented and accepted with thanks.
- *A joint meeting* with Michigan's seven Delegates to the AMA House of Delegates was held: problems, resolutions and other matters that may be presented to the AMA in New York City, June 1-5, 1953, were discussed.
- *Treasurer's Report.*—A progress report on bonds of the Michigan State Medical Society was presented by Treasurer Wm. A. Hyland, M.D., Grand Rapids.
- *Legal Counsel's Report.*—Mr. J. Joseph Herbert presented opinions on the following matters: (a) the legality of chiropodists giving hypodermic injections; (b) creation of a registry of the blind by the Michigan Department of Health; (c) payment of fees to surgical assistants.
- *The monthly report of the Rheumatic Fever Co-ordinator,* Leon DeVel, M.D., Grand Rapids, was presented and accepted.
- *Suspension and Revocation of License.*—What should be done by County Medical Societies when a member thereof has his license either suspended or revoked by the Michigan State Board of Registration in Medicine? This question was thoroughly discussed and it was felt that it should be the subject of further discussion at the annual County Secretaries Conference January 31, 1954.

MEDICAL MEETINGS AND CLINIC DAYS

A list of known medical meetings and clinic days, sponsored by county medical societies and other physicians' groups in Michigan, follows:

1953

Aug. 20 Third Annual Clinic, Central Michigan Committee, ACS Michigan Committee on Trauma, plus Michigan National Guard Medical Personnel, and Michigan Society of North Central Counties — Grayling

Sept. 22 Michigan Chapter, American College of Surgeons — Grand Rapids

Sept. 23-25 MSMS ANNUAL SESSION — Grand Rapids

Oct. 7 Clara Elizabeth Fund for Maternal Health and Genesee County Medical Society — Flint

Oct. 21 Michigan Cancer Conference — East Lansing

Autumn MSMS Postgraduate Extramural Courses — Statewide

1954

Mar. 10-12 MICHIGAN CLINICAL INSTITUTE — Detroit

Apr. 14 Genesee County Medical Society Ninth Annual Cancer Day — Flint

May 12 Annual Clinic Day and Alumni Reunion of the Wayne University College of Medicine, Hotel Fort Shelby — Detroit

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Proposed

BEAUMONT MEMORIAL



"A little from many will build the Beaumont Memorial—a monument to the generosity of Michigan's medical men."—Otto O. Beck, M.D.

Beaumont Memorial Restoration Committee
Box 539, Lansing 3, Michigan

I attach my check in the amount of: $.....
OR
I pledge the amount of: $.....

payable on or before.....
to assist my fellow doctors of medicine of Michigan in building the Beaumont Memorial on Mackinac Island, Michigan.

..... M.D.

.....
street

.....
city state

ome questions about filter cigarettes hat may have occurred to you, Doctor

and their answers by the makers of Kent

Q: What materials are used in cigarette filters?

A: Until just recently, cellulose, cotton or crepe paper were the only materials used in cigarette filters.

Now, after long search and countless experiments, KENT's "Micronite"* Filter has been developed. It employs the same filtering material used in atomic energy plants to purify the air of minute radio-active particles.

Q: How effective are these cigarette filters?

A: Scientific measurements have proved that cellulose, cotton or crepe paper filters do not take out a really effective amount of nicotine and tars.

However, these same tests also have proved that KENT's exclusive Micronite Filter *approaches 7 times the efficiency of other filters in the removal of tars and nicotine* and is virtually twice as effective as the next most efficient cigarette filter.

Q: Do physiological reactions to filter cigarettes differ?

A: The drop in skin temperature occurring at the finger tip induced by filtered cigarette smoke was measured according to well-established procedures. (a, b)

For conventional filter cigarettes, the drop was over 6 degrees. For KENT's Micronite Filter, there was no appreciable drop.

Q: Does an effective cigarette filter also remove the flavor?

A: KENT's Micronite Filter . . . the first cigarette filter that really works . . . lets smokers enjoy the full pleasure of a really fine cigarette, yet gives them the greatest protection ever from tars and nicotine.

In less than a year's time, the new KENT has become so popular it outsells brands that have been on the market for years.

• • •

Today, KENTs are sold in most major U.S. cities. If your city is not yet among them, simply write to P. Lorillard Co., 119 West 40th Street, New York, N. Y., and special arrangements will be made to assure you of a regular supply.

References Cited

a. *J.A.M.A.*, Vol. 103, 1934, p. 318
b. *J.A.M.A.*, Vol. 135, 1947, p. 417

* PATENT APPLIED FOR



Scholarships in Michigan

AT UNIVERSITY OF MICHIGAN

Roy Bishop Canfield Memorial Fellowship in Otolaryngology

Established in 1932 through the generosity of Mrs. R. B. Canfield, in memory of her husband's years of devotion to his department and in order that the influence which he had during his twenty-eight years of service in the Medical School may be continued in the training of young graduates to carry on work in otolaryngology.

The interest on the endowment of $35,000 is to "be given to young men physically and mentally equipped, but perhaps financially unable, to carry on with honor work in this special field of medicine—young men not only of ability but of such sincerity of purpose and of effort that they will uphold the high standards to which Doctor Canfield pledged himself." The holder of this fellowship in 1942-1946 was Doctor William N. Sauer.

Edward Swift Dunster Fellowship In Obstetrics and Gynecology

Totaling $1,500 in 1936 and increased to $3,230 in 1938, this fellowship was donated by the children of the late Edward Swift Dunster, for the purpose of establishing and maintaining a fellowship in the Medical School in honor of their late father, who was for many years and at the time of his death, Professor of Obstetrics in the Medical School.

Dr. Louis Merwin Gelston Fellowship

Established in 1936 by bequest of Lucia C. Gelston, Ann Arbor, Michigan, as a memorial to her husband, Louis Merwin Gelston, A.B., '01, Ph.D., '03, M.D., '05. The annual income is to be used for one or more postgraduate research fellowships in the field of medical science, or in other fields as closely allied thereto as feasible. The medical faculty sets the length of time in which one person may be benefited by the fellowship. The amount of such fellowship or fellowships shall be determined by the Regents upon recommendation of the Medical School faculty. In case there is a member or members of the Nu Sigma Nu fraternity who have shown exceptional ability in medical research and who wish to carry on such research work after graduation, he or they shall have preference over others seeking such awards.

George Slocum Research Fund

Established in 1933 by the will of the late Professor George Slocum. One half of the income from $1,000 is to be added to the Weeks research fund annually. The other half of the income is to be added to the principal until such time as the total income shall amount to $1,000 a year, at which time the whole income may be used for research in ophthalmology.

John E. Weeks Scholarship for Research Work in Ophthalmology

Established in 1921 by a gift of $10,000, income from which is awarded annually.

Walter R. Parker Scholarship

In 1936, by bequest of the late Margaret Watson Parker, Detroit, Michigan, wife of Doctor Walter Robert Parker, B.S. (Mech. E.), '88, formerly professor of ophthalmology in the Medical School, a fund of $30,000 was provided for the establishment of this scholarship in ophthalmology. Candidates for appointment must be graduates of a Class A medical school, must have completed one year's rotating internship in a hospital accredited by the American Medical Association, and must be eligible to enroll in the Horace H. Rackham School of Graduate Studies. The scholarship is administered by a committee consisting of the President of the University, the Dean of the Medical School and the Professor of Ophthalmology. Candidates should apply to the Professor of Ophthalmology before December 1 of the year preceding the year (July 1 to June 30) in which the scholarship will be held.

John Harper Seeley Fellowship Fund

Established by Mr. and Mrs. Halstead H. Seeley in memory of their son, John Harper Seeley. This fellowship was established to provide fellowships for graduate students in medicine.

AT WAYNE UNIVERSITY COLLEGE OF MEDICINE

Wayne University has in the College of Medicine thirteen graduate teaching assistantships which are used primarily for graduate work in our college. These positions pay $3,104 annually.

It also has a Postgraduate Scholarship Award given out yearly by the Alumni Association to a recent graduate for the best scientific work done during the year.

WHEN DIETARY SUPPLEMENTATION IS NEEDED... what more could a supplement provide?

If the concept of an ideal dietary supplement could be formulated, it might well be one that provides qualitatively every substance of moment in human nutrition. It would provide those for which human daily needs are established as well as others which are considered of value, though their roles and quantitative requirements remain unknown.

How Ovaltine in milk approaches this concept, and how well the recommended three glassfuls daily augment the nutritional intake, is shown in the appended table. The two forms of Ovaltine available—plain and chocolate flavored—are closely alike in their nutrient values.

THE WANDER COMPANY, 360 N. MICHIGAN AVE., CHICAGO 1, ILL.

Ovaltine

Three Servings of Ovaltine in Milk Recommended for Daily Use Provide the Following Amounts of Nutrients

(Each serving made of ½ oz. of Ovaltine and 8 fl. oz. of whole milk)

MINERALS		VITAMINS	
*CALCIUM	1.12 Gm.	*ASCORBIC ACID	37 mg.
CHLORINE	900 mg.	BIOTIN	0.03 mg.
COBALT	0.006 mg.	CHOLINE	200 mg.
*COPPER	0.7 mg.	FOLIC ACID	0.05 mg.
FLUORINE	3.0 mg.	*NIACIN	6.7 mg.
*IODINE	0.15 mg.	PANTOTHENIC ACID	3.0 mg.
*IRON	12 mg.	PYRIDOXINE	0.6 mg.
MAGNESIUM	120 mg.	*RIBOFLAVIN	2.0 mg.
MANGANESE	0.4 mg.	*THIAMINE	1.2 mg.
*PHOSPHORUS	940 mg.	*VITAMIN A	3200 I.U.
POTASSIUM	1300 mg.	VITAMIN B_{12}	0.005 mg.
SODIUM	560 mg.	*VITAMIN D	420 I.U.
ZINC	2.6 mg.		

*PROTEIN (biologically complete)	32 Gm.
*CARBOHYDRATE	65 Gm.
*LIPIDS	30 Gm.

*Nutrients for which daily dietary allowances are recommended by the National Research Council.

Cancer Comment

MASKED INTERNAL CANCER SYMPTOMS—LYMPHOBLASTOMA

One of the problems facing the busy medical practitioner is the early detection of internal cancer. That group of diseases encompassed under the heading of *lymphoblastoma* is a good example of this difficult diagnostic problem. Not only does this disease present variable symptomatology but those clear-cut findings such as blood changes and positive lymph node enlargement are slow to make their appearance in many instances. The lymphoblastomas, which include the leukemias, Hodgkin's disease, lymphosarcoma and a few other variants, may be aptly referred to, therefore, as a group of internal cancers with masked symptoms.

Fever, often in the form of night sweats, is one symptom which should not be neglected.. Usually one does not relate fever to cancer until the later disease stages are reached or until the neoplasm has picked up a moderate amount of infection. The mechanics of fever production is usually one of toxin released from cancer tissue breakdown. A favorite site for such toxin release is in the deep non-palpable retroperitoneal lymph nodes. In fact, it is the involvement of these same nodes that sometimes causes the night sweats of tuberculosis.

A concept that retroperitoneal node invasion in many cases of lymphoblastoma is an early feature, if not the origin of the cancer transformation, permits one to rationalize fever as a masked symptom. Recognition of the presence of deep nodes may also influence the plan of treatment of the disease. It is so easy to direct treatment towards visible or obvious adenopathy at the expense of equally significant internal involvement.

Constipation is a second significant symptom of lymphoblastoma cancer. Here again this symptom is commonly hidden by virtue of its frequency in so many every-day non-cancerous patients. True, we have modern cancer education to thank for reminding us of "any change in bowel habits," but it is so easy to relate this diagnostic hint to just that older group of patients who are more inclined to develop cancer of the colon. And how often has the completely "silent" adenocarcinoma of the splenic flexture confused physicians by causing very little change in bowel habits. Likewise the masked symptom of constipation is confusing in the younger patient with unsuspected lymphosarcoma. Enlarged retroperitoneal lymph nodes again are often the actual cause of the increasing constipation.

Pruritus and fatigue are two other symptoms which are apt to be overlooked in early lymphoblastoma. In this connection one recalls to mind the old teaching that the skin may often be considered as a "mirror" of the functioning ability of the internal body organs. Truly, it is somewhat more difficult to inter-relate the pruritus or the later developing exfoliative dermatitis to associated retroperitoneal invasion even though we know by experience the two are often concurrent. Fatigue is, of course, the result of the toxic effects of the disease.

Abatement of the patient's fever, constipation, and pruritus follows x-ray treatment to the lumbar areas much more frequently than treatment given just over the local superficial nodes. Lymph nodes in the neck and axillae will disappear without direct treatment to them. Occasionally, the converse is true in which superficial hypertrophied nodes will appear to be quite radioresistant until a few treatments are directed retroperitoneally.

This lymphoblastoma disease, striking at almost any age and frequently in a most insidious manner, may quite aptly apply for the title of internal cancer with masked symptoms.

Fever, constipation, fatigue, and pruritus existing often in the absence of blood changes and superficial adenopathy are common though unstriking symptoms. Would a concept of early invasion of retroperitoneal areas in many cancers of the reticuloendothelial system assist the examining physician in his office to keep certain masked symptoms in focus?

Most cancer quacks make some pretense of religion; religion is not regulated by law, and the public seldom questions the honesty or sincerity of one who claims to be an ordained minister or priest.

* * *

It is impossible to rid the world of quacks. So long as we have desperate patients we shall have quacks. But the physician can conduct a three-pronged offensive against the cancer charlatan: he can supply his patients and the general public with correct information; he can give utmost attention to all cancer patients, regardless of prognosis; and he can offer hope. In short, he can beat the quack at his own game.

* * *

Desperation is born of fear, and as cancer is among the most feared of all diseases, cancer victims offer a fertile field to the charlatan.

* * *

The best means available to combat the quack is aggressive therapy or, when that is not possible, time-consuming personal attention on the part of the physician.

antibiotics . . .

USE ERYTHROCIN*



. . . especially effective against gram-positive organisms including those resistant to penicillin and the other antibiotics.

USE ERYTHROCIN*



. . . has low toxicity; orally effective against infections caused by staphylococci, streptococci and pneumococci.

USE ERYTHROCIN*



. . . indicated in pharyngitis, tonsillitis, scarlet fever, pneumonia, erysipelas, osteomyelitis and pyoderma.

USE ERYTHROCIN*



. . . gastrointestinal disturbances mild and relatively rare; no serious side effects reported.

USE ERYTHROCIN*



. . . fully potent; average adult daily dose 0.8 to 2.0 Gm., depending on type, severity of infection.

USE ERYTHROCIN*



. . . special absorption-favoring coating; 0.1 Gm. (100 mg.) tablets supplied in bottles of 25 and 100. Abbott

* *Trade Mark for*
ERYTHROMYCIN, ABBOTT

1-178

Novel Michigan Loan Fund Brings Doctors to Rural Areas

Michigan—through a generous loan fund—has found a partial solution to the problem of supplying doctors of medicine to rural areas of this state.

Often the supply of M.D.'s in outlying sections of the state does not adequately serve the needs of the people in those sections. Some years ago, the Michigan Foundation for Medical and Health Education became aware of this need and in 1948 established a revolving loan fund called the "Fund for Encouragement of Medical Practice in Rural Areas."

The program is administered by a Qualifications Committee composed of four outstate M.D.'s with a practical awareness of rural needs who advise the Board of Trustees of the Michigan Foundation for Medical and Health Education, plus the Deans of Michigan's two Medical Schools. Senior medical students, interns or residents in hospital service who require financial aid are eligible for the loans.

The requirements for a loan, however, help provide added medical service to the rural areas of Michigan. To secure the money the applicant is expected to practice in a rural area for a minimum of three years. A rural area under the terms of the Fund is any town of 5,000 population or less. The loan is without interest until the end of the applicant's first year of medical practice.

The loans are extremely flexible. In fact, they are tailor-made to fit the needs of the particular resident, intern or upperclass medical student. Some loans supplement living expenses; others pay for tuition; others special expenses of medical education.

The Qualifications Committee considers that each loan is merely an "Assist" to the recipient in that the money received from the Foundation is added to the current income of the resident or intern or upperclassman in medical school. It serves to "keep his head above water" financially.

Because each financial situation varies, the loans are far from uniform. One M.D.-to-be is receiving $400 twice each year to help pay his tuition in medical school; another is loaned $50 a month the year around; a third gets $100 per month during the school year and so on. Loans fit the needs. They are tailor-made.

No matter the amount of the loan or how it is dispensed, the youthful recipient generally follows this pattern: he starts practice in the rural area, as stipulated; most often the new M.D. remains after the three-year period is over to continue the enjoyment of friendly people, appreciative patients, excellent fishing and hunting and the relaxation opportunities available in outdoor Michigan—especially in the northern area of the state. This period as general practitioners tends to make better doctors of the M.D.s as it extends their education to include general practice whether they remain as G.P.s or later enter specialties. And the people themselves benefit by the Foundation's plan of interesting doctors to practice in rural areas.

The Michigan Foundation for Medical and Health Education through its Loan Fund is providing a service to the State of Michigan. Actually the value of the money expended as loans cannot be measured in cold cash because its true value can only be gauged in the gratitude of the people who are given rural general practitioners.

NATIONAL ECONOMICS

A recent report shows that $246,000,000 was paid to some two and one-half million farmers under agricultural conservation programs in the 1950-51 fiscal year. The purpose was to pay the farmer to engage in conservation activities.

As usual, Michigan, a high ranking state in terms of revenue paid to the Federal Government, is forty-sixth in terms of average amounts paid to farmers under this scheme, with an average of $60.50; Arizona ranked first with $758.63.

Sidelights on the effect of the steel strike of 1952 show a loss of 5,000,000 tons of steel according to the U. S. Steel Corporation report. The wage loss was $41,000,000, and the government lost $281,000,000 in taxes. State and local taxes dropped $7,000,000.—Paul Shafer, M.C.

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PR REPORT

Annual Session Publicity

Sound press relations are an important part of any annual meeting of an organization.

Good publicity about the organization establishes the good-will and friendship so necessary to the continued successful operation of the association.

Keeping that in mind, great effort and thought goes into publicity for the annual meetings of the Michigan State Medical Society—the Michigan Clinical Institute, in March, and the Annual Session, in September. Since this issue of THE JOURNAL is devoted to information on the 1953 Annual Session at Grand Rapids, these are the steps taken publicity-wise for the meeting.

Briefly the publicity for the Annual Session can be divided into the two main classifications—Advance Publicity and Publicity During the Annual Session.

Planning the Advance Publicity for the September Annual Session begins in April. A timetable of news releases to medical publications, newspapers, and radio stations is developed. Many factors are considered in the development of this schedule. Since the medical publications include County Medical Society Bulletins in Michigan and surrounding states, THE JOURNAL of the American Medical Association and medical specialty group publications in Michigan, the deadline for sending releases to these groups is considerably ahead of the time necessary to send to newspapers. Thus the medical publications begin receiving stories on the meeting the last of May.

The releases to newspapers and radio stations begin the last week of August and continue once a week until the Annual Session is held. The first release announces the meeting. The other releases are localized to individual newspapers where possible and give prominence to the names of M.D.'s taking part in the meeting as speakers, discussion conference leaders, House of Delegates members, et cetera.

In addition to advance releases to publicize the meeting, a press room is maintained during the Annual Session (and the MCI). This serves as a focal point for the press to gather and interview the speakers plus receiving the service of members of the Press Committee in answering technical questions.

One week prior to the meeting a press dinner is held for members of the press located in the area where the Annual Session is to be held. At this meeting press kits containing all information necessary for complete coverage of the meeting are distributed.

The excellent response of news coverage by papers all over Michigan attests to the value of well-planned press and publicity relationships.

New PR Field Secretary

Dwight D. Jarrell, former Grand Rapids newsman *(The Herald),* returned to the Detroit office of MSMS on June 1, after completing duties in Lansing. Mr. Jarrell replaced Daniel E. Ford as MSMS Public Relations Field Secretary in the Detroit and Southeastern Michigan area.

The new MSMS staff member will be visiting individuals and counties in his district shortly.

Mr. Jarrell was with the Grand Rapids *Herald* for five years before joining MSMS. He attended Michigan State College and was in the Air Force during World War II.

PR Capsules

In continuing MSMS practice of maintaining liaison with other organizations, H. B. Zemmer, M.D., Lapeer; MSMS Legal Counsel J. Joseph Herbert, of Manistee; and MSMS Public Relations Counsel, Hugh W. Brenneman, were appointed to the governing board of Girlstown. The Girlstown project, founded by the Girlstown Foundation, is a program of the Michigan Federation of Women's Clubs which seeks to establish a home for girls. It is in some ways similar to the famous Boystown.

* * *

Benton Harbor's Radio Station WHFB & WHFB-FM is the latest to re-introduce the popular "Tell Me, Doctor" radio series to its listeners. Although no new recordings are being made of the program, all the records are filed in the MSMS office at Lansing for distribution to Michigan radio stations. County Medical Societies are urged to contact radio stations in their areas and offer the recordings.

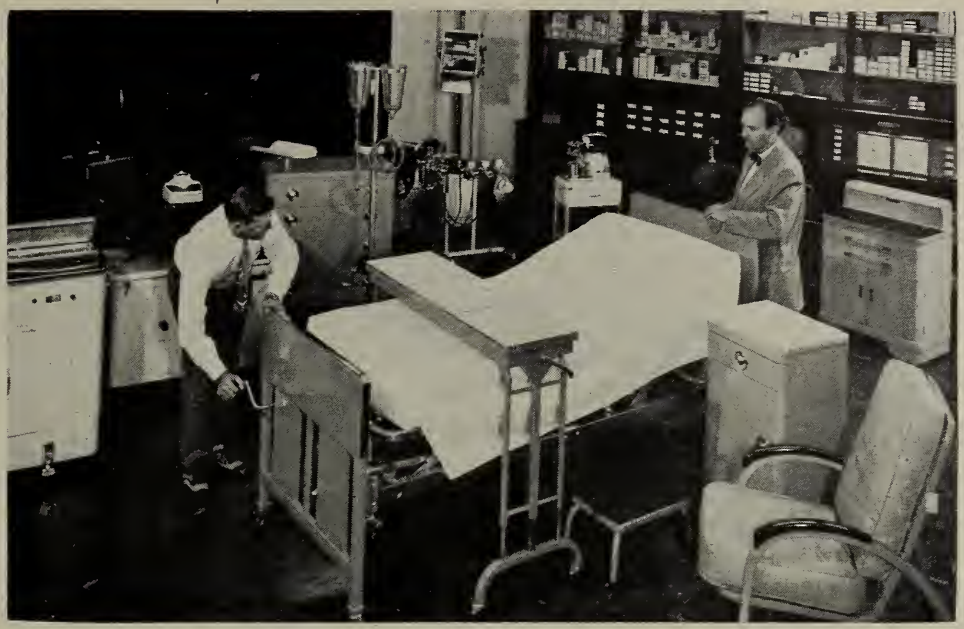
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There's still time to book the newest MSMS exhibit for county fairs and other summer festivals in your area. The exhibit is self-contained in one unit and shows motion pictures. It occupies a 3 x 10 space.

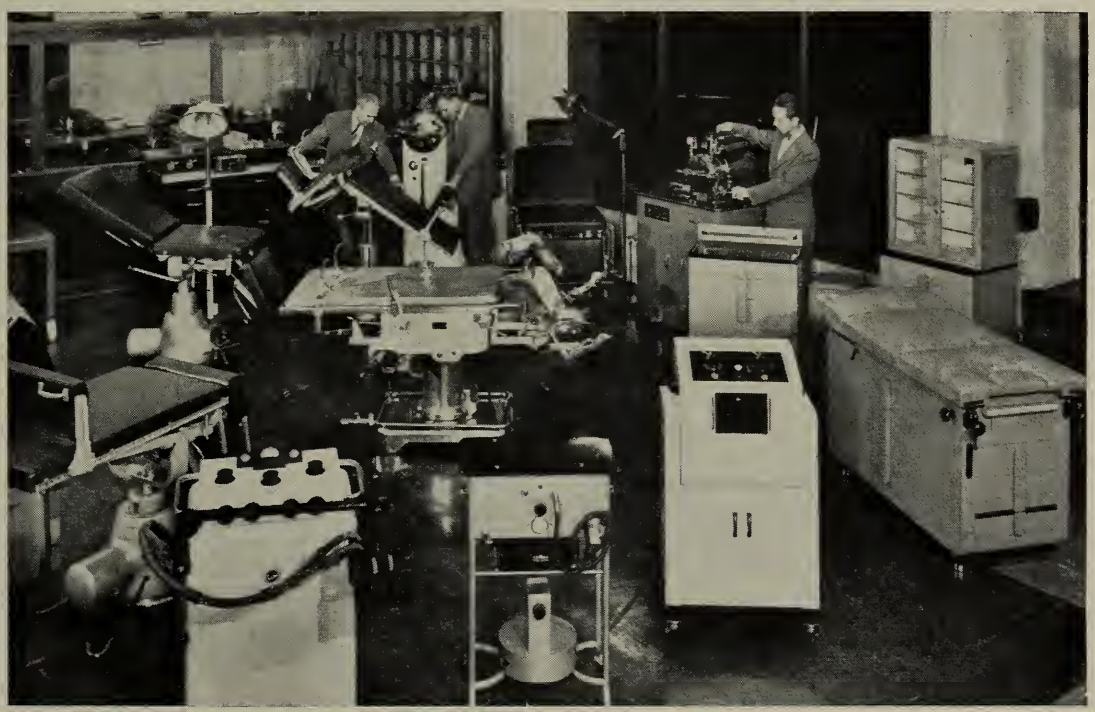
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The MSMS Television Committee is considering a plan of distribution for the five-minute slide films to be offered to TV stations in Michigan this fall. The slide films will cover a variety of subjects both scientific and socio-economic.

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Editorial Comment

"I'M TOO BUSY"

Anyone who participates in voluntary organizational work in our profession soon finds himself particularly obstructed by the above phrase. This is particularly evident when he attempts to solicit the efforts of others. Paradoxically, it is almost axiomatic that if you want to get a job done, pick on the busiest man you know and he'll do it!

We made a personal survey of several general practitioners who everyone knows are busy men, darned busy. We asked each of these practitioners. in separate conversations, a few leading questions. For instance, "Do you ever get time to attend church? What about going to a show? Do you have time to play golf, bridge, poker? What hobbies do you have and do you have time to follow them?" These questions lead to the following conclusion: Everyone actually "has the time," if he just wants to do something bad enough!

Obviously, there are some few "sorry" days in any physician's routine, where extraordinary or unusual circumstances arise. These absolutely preclude stopping "to have a Coke" or any other such activity, usually meaning from fifteen to thirty minutes up to an hour, in just plain "chewing the fat." When a fellow is tired, perhaps has been up most of the night, it's difficult, almost impossible, to settle down for any constructive effort mentally or physically. He doesn't want to think, study or write. He just wants to sit!

Whenever we hear a colleague tell about some comedian, "I heard last night on the Blah-Blah Hour, and, boy, was he a riot," just watch out The phone will ring, and you'll hear that same guy say, "No, Mrs. Jones, I just haven't had time to phone in that prescription to the druggist for your boy. You know there's a flu epidemic going on, and all of us doctors are just worked to death. So I just haven't had time. I've been too busy . . ." Oh, yeah?—Editorial, *J. Missouri M. A.,* May, 1953.

SECOND LOOK AT SOCIALIZATION

Those who believed the operation of last November 4, wrote finis on efforts to combat the malignancy of socialization in this country should follow the precedent of several well-known surgeons and open up for a second look. Reports from the laboratory may seem quite satisfactory but careful exploration reveals much evidence of disease.

From the Superintendent of Documents, Government Printing Office, may be obtained a volume, Financing Social Security. Price is one dollar. It was written by Ida C. Merriam, of the Division of Research and Statistics of the Federal Security Agency. This is the division headed by I. S. Falk who has spent his life promoting various schemes of socialization, particularly those involving medicine.

Philosophy of the publication, undoubtedly determined by Falk, is shown in one revealing statement. There are others but this one should be sufficient:

"The extent of the shift in income distribution will be greater if—as is quite generally true in social insurance programs—the benefits, in relation to previous earnings and contributions, are proportionately higher for low—than for the higher—income earners. The effect on the distribution will also be greater to the extent that contributions used to finance benefits come in relatively larger measure from the higher-income groups."

This was not written by Karl Marx. It was written by a federal employe whose salary is paid from taxes. She and her superior, Falk, are still employed by the federal government. They will hold their jobs because they come under Civil Service. They will continue to produce this kind of material, to be published by the Government Printing Office.

Perhaps those who devised the second look operation developed an idea which can be applied to more than one kind of malignancy.—Editorial, *Northwest Medicine,* May, 1953.

PHYSICIANS ASSIST MEDICAL EDUCATION

More than $3,150,000 for direct support of medical education was given in 1952, by some 37,000 doctors in the United States, says Dr. Donald G. Anderson, secretary of the American Medical Association's Council on Medical Education and Hospitals. And that amount is exclusive of sums given for buildings, endowments, scholarships, research, and other special purposes.

In addition, reports from seventy-six of the seventy-nine medical schools throughout the country show that more than 29,000 doctors contributed a further $2,258,534 directly to the teaching budgets of those institutions.—Editorial, *The American Academy of General Practice,* May, 1953.

* * *

A diagnosis of cancer may provoke a tempest of despair which often proves overwhelming to the patient and his family.

* * *

Despite monumental efforts to stress hope and emphaize successful results for cancer patients, most lay persons still regard a diagnosis of cancer as a death sentence.

The JOURNAL
of the Michigan State Medical Society
Issued Monthly Under the Direction of the Council
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The Adenoid Problem

By Ben H. Senturia, M.D.
St. Louis, Missouri

MANY discussions have appeared in the lay and medical press regarding the indications for tonsillectomy and adenoidectomy. This morning I would like to direct your attention to the possibility that we should be doing more and better adenoidectomies.

The introduction of chemotherapeutic agents and antibiotics has made possible the prompt control of most nose and throat diseases and hence a lowered incidence of middle ear and mastoid infections. However, there has been considerable discussion, recently, in the otologic literature regarding the apparent increase in the incidence of middle ear effusions and the increasing number of hearing problems.

On first examination these several observations appear unrelated, but on closer inspection, these problems, (1) the widespread use of antibiotics to control ear, nose and throat diseases, (2) the high incidence of middle ear effusions, and (3) the increased number of hearing problems, may have as a common denominator the adenoid problem.

More patients, especially children, are being referred to the otolaryngologist with symptoms which appear to be a result of hyperplasia or infection of the adenoid. These symptoms include difficulty in hearing, persistent nasal congestion, postnasal drainage, constant clearing of the throat, gagging and coughing. The history is remarkably consistent. The patient reports that he developed an upper respiratory infection and was seen by his physician. A diagnosis of tonsillitis or respiratory infection was made. One of the sulfonamides or an antibiotic was prescribed.

The patient's febrile reaction was controlled promptly. Any tonsillitis present cleared in a matter of a few days. Although the patient was not entirely well, for one reason or another the expensive drugs were stopped. This abrupt cessation of therapy occurred despite the persistence of nasal congestion, postnasal drainage, a nagging cough and a stuffy feeling in the ears.

At this point, the patient called his physician and was told that he had better see his Ear, Nose and Throat specialist, or, as was frequently the case, decided on his own to make an appointment with the otolaryngologist.

What does the specialist observe in such a situation? Since children constitute the largest percentage of these cases, let us describe the otorhinological findings in a typical child.

Case 1.—Johnny is five years old, healthy and well nourished but looks the worse for several restless nights. The temperature is not elevated.

Ears: The ear canals are clear but ear drums are full and reddened or dull brown and retracted, and there is fluid visible in the middle ears. Hearing is obviously decreased.

Nose: The nasal mucous membranes are reddened and the turbinates congested. Mucopurulent secretion is present in each nasal fossa. Fair shrinkage of the turbinates is obtained within five minutes after the instillation of nose drops. Through the nasal fossae the adenoid mass may be seen obstructing the posterior nares and the upward movement of the soft palate is impeded by the adenoid. The surface of the adenoid is fiery red and numerous small hemorrhagic punctate areas are observed. A small amount of thick mucoid secretion can

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Presented before the general assembly of the Michigan State Medical Society, Detroit, Michigan, September 25, 1952.

From the Department of Otolaryngology, Washington University School of Medicine, and the Department of Otolaryngology, Jewish Hospital, St. Louis, Missouri.

This study was assisted by a grant from the St. Louis Otological Foundation.

be noted adhering to the upper surface of the soft palate.

Throat: The mouth cavity is clean. The tonsils are only slightly enlarged and are somewhat reddened and there is increased peritonsillar injection. The crypts contain a small amount of cheesy debris. The posterior oropharyngeal wall is covered with multiple, reddened, granular follicles and the lateral bands are reddened and hyperplastic and extend superiorly as far as they can be visualized up into the nasopharynx. A small amount of mucopus can be observed adhering to the posterior wall of the oro-pharynx.

Neck: There are numerous posterior triangle nodes and slightly tender movable jugulo-digastric nodes.

How shall we interpret these findings? What has transpired in the upper respiratory tract to cause this clinical picture? More specifically, what histopathologic and bacteriologic transformation has occurred in this area? In order to better appreciate the changes, let us review briefly some basic embryology and anatomy.

The adenoid first appears as a subepithelial infiltration of lymphocytes at the third to fifth month of intrauterine life.[1,2] By birth it has grown rapidly as a result of the development of germinal centers. Within a few months after birth, the dense fibrous base on which the adenoid rests has sent out trabeculae containing blood vessels, nerves and lymph vessels to each lobule. As it develops, it becomes a lobulated organ arranged rather regularly about a central depression. The surface is thrown into folds and deep furrows into the base of which open numerous glands.[2]

This main adenoid mass is centered on the posterior pharyngeal wall[5] but frequently appears to extend onto the roof of the nasopharynx.[11] Often its lymphoid elements on the roof are indistinguishable from the main adenoid mass. In fact, there are numerous elevations in the nasopharyngeal mucous membrane produced by underlying collections of lymphocytes (lymph nodules) which are believed to have the same function as the larger masses found in the adenoid or tonsils.[16] These may increase in size along with the adenoid mass to overgrow the Eustachian orifice and obstruct the posterior nares.

The adenoid with its peculiar distribution of folds and deep-lying crypts offers a unique site for the development of acute and chronic infections, a site where organisms may grow and develop a symbiosis with the tissues.[14] The normal flora usually consists of Streptococcus viridans and non-pathogenic Neisseria.[18] For some unexplained reason, the hemolytic streptococcus frequently appears in the nasopharynx during the winter and grows in profusion in the folds of the adenoids.[3]

In response to a bacterial attack there is a rapid increase in the volume of the lymphoid tissue making up the adenoids and pharyngeal nodules. This hyperplasia of lymphoid tissue occurs with dilatation of blood vessels and active migration of lymphocytes and neutrophiles into the epithelial covering,[14] thus producing the reddened, granular pharynx. The migrating cells combine with the desquamated cells, epithelium, and bacteria to form the follicular or membranous exudates which we see through the child's nose covering the folds or the "crypts" of the adenoid. As the process progresses, multiple small abscesses may form at the depths of the furrows. With each new infection more hyperplasia occurs, increasing the volume and size of the adenoid.

With continued insult the lymphoid nodules on the roof and lateral walls of the nasopharynx and on the tubal folds enter into the process of hyperplasia until we see a picture of diffuse overgrowth in the nasopharynx and then of obstruction of the posterior nares and of the pharyngeal ostia of the Eustachian tube. Thus the adenoid whose function was originally protective has now hyperplased until it is pathological. Its presence in the nasopharynx presents a mechanical obstruction which interferes with good ear and nasal function.

As a result of this obstruction, inadequate ventilation of the nose and interference with the normal nasal ciliary activity occurs. When this malfunction is combined with an acute nasopharyngeal infection, contamination of the nasal fossae results. We then observe increasing congestion of the mucous membrane and the turbinates, stagnation of secretion in the nasal fossa, obstruction of the sinus ostia, and finally a filling of the sinus cavities with purulent secretion.

The nose is only one of the contiguous structures to be contaminated. The mechanical interference with drainage from the Eustachian tube plus the subepithelial extension of the infection up the tube[6,8,17] results in an intense congestion of the epithelium along the entire Eustachian tube and middle ear, an infiltration with lymphocytes, and an outpouring of mucoid secretion into the lumen. Inability to ventilate the middle ear via the constricted Eustachian lumen results in a negative middle ear pressure (much as one gets on rapid descent in an aeroplane). If we now combine

acute inflammation plus negative pressure, we have the explanation for the outpouring of transudate or exudate, and thus the picture of middle ear effusion with its dull reddish brown, retracted ear drums. If the inflammatory response continues, a full red ear occurs. As a consequence the patient complains of "talking into a barrel," difficulty with hearing, dizziness, tinnitus, et cetera.

It is not enough that the adenoid has monopolized almost the entire nasopharynx. Now the purulent drainage from the nose stagnates along the superior surface of the soft palate and adheres to the surface of the irregularly shaped adenoid. As a consequence, all along the avenues of drainage, especially along the lateral bands and on the posterior pharyngeal wall, there are produced islands of lymphoid tissue. All of these nodules may contain infected crypts.

It is clear, then, that the cause of Johnny's persistent sequelae may lie within the nasopharynx. These sequelae have made it necessary for us to reacquaint ourselves with the anatomy and physiology of this area.

Because of the relatively small size of the bony cavity and the peculiar anatomy which is involved, it appears that infection and/or hyperplasia of the lymphoid tissue in the nasopharynx area may lead to a host of symptoms. The extent of the symptoms depends on the (1) original size and shape of the nasopharynx, (2) the size and distribution of the adenoids, as well as (3) the shape and position of the Eustachian orifice and its associated folds. With a view to understanding the symptoms and diseases evolving from changes occurring in the nasopharynx, let us review briefly the surgical anatomy of this area.

The nasopharynx is surrounded by a strong, fibrous aponeurosis, supported externally by the constrictor muscles.[5,20] During swallowing and gagging, the stylopharyngeal muscles pull the pharyngeal muscles superiorly. This is demonstrated when one tries to operate without a satisfactory depth of anesthesia and one is confronted by the horizontal fold of mucous membrane just above the level of the soft palate. It is this same mechanism which causes the thick, viscid, adherent secretion to be expressed from the nasopharynx into the oropharynx.

The widest part of the nasopharynx is almost entirely bony and not capable of much change in form. The anterior wall is formed by the two posterior nares with the posterior margin of the nasal septum between them. On the lateral wall one sees the pharyngeal ostium of the Eustachian tube with its associated cartilages and folds and the pharyngeal recess. I should like to focus your attention on these folds because we will refer to them as one reason for occasional failure of adenoidectomy.[15] These folds consist of the following:

(1) Salpingo-pharyngeal fold—from the inferior end of medial lamina to the pharynx.

(2) Salpingo-palatine fold—from the tip of the lateral lamina of the cartilage to the palate.

(3) Salpingo-nasal fold—from the superior margin of the tube to the roof of the nasopharynx.

Just posterior to the Eustachian tube, on the lateral wall, there is a deep triangular lateral extension of the nasopharynx which is termed the pharyngeal recess (Rosenmueller's fossae). This recess is usually lined or filled with lymphoid tissue which sometimes overflows onto the tubal cartilages, interfering with tubal ventilation and contributing to certain hearing problems to which we have referred.[20] In operating in this area it is well to keep in mind that its lateral wall is in close relation to the carotid artery.

The manner in which the posterior wall of the nasopharynx joins the roof of the nasopharynx is of surgical importance. Good visibility of the nasopharynx is influenced by the following anatomical facts. The roof is formed by the basilar part of the occiput and the body of the sphenoid. The posterior nasopharyngeal wall is composed of the atlas and axis. As you recall, the skull is almost immobile on the atlas. The atlas can only rotate on the axis. Therefore any flexion or extension of the head on the neck must occur at the junction of the axis and the third cervical vertebra.

For practical purposes we may describe three types of nasopharynx[7,15,19] depending on whether the posterior wall joins the roof as a continuous smooth arch or at an abrupt angle.

(1) Steeple type—a high narrow nasopharynx in which the roof joins the posterior wall at an obtuse angle—is most common in adults.

(2) Flat type—the roof and the posterior wall join at an angle of 90 degrees. This forms a deep nasopharynx and it is frequently difficult to reach the curtain of adenoid lying anteriorly on the roof.

(3) Sloping type—the roof is at the same level as the inferior turbinate producing a relatively flat elongated nasopharynx. This is the type which can be seen commonly in small children.

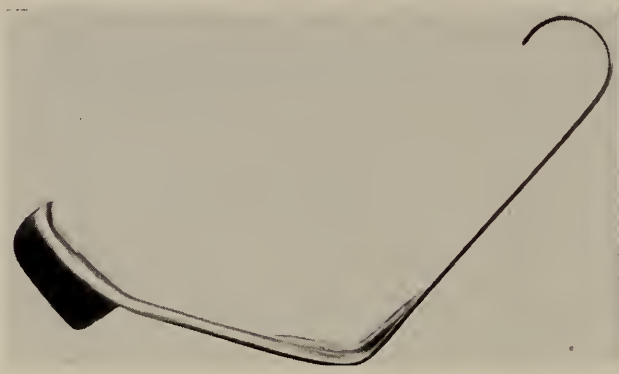


Fig. 1. Sideview of nasopharyngeal speculum showing long, flat angled handle to which is attached an inverted incomplete U-shaped tube. Note the absence of restricting walls.

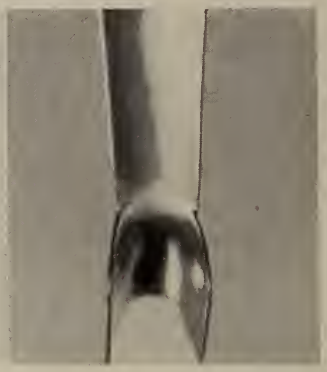


Fig. 2. Nasopharyngeal speculum viewed from above and showing excellent visibility.

These various types of nasopharynx introduce special problems in adenoid surgery. A routine adenoidectomy may be a simple and straightforward affair in that the main mass of adenoid tissue can be removed without difficulty from the posterior pharyngeal wall with the LaForce adenotome or curette. At least four problems, however, may complicate the routine procedure.

1. Adenoidectomy in the young infant. Consider the position of the adenoid in the young infant with severe nasal obstruction and consequent difficulty in feeding. The sloping type nasopharynx is tiny and shallow with a low lying roof, so that an adenoid no larger than the tip of the small finger will obstruct the posterior nares. You recall that the adenoid is well developed at three months. If the nasopharynx is small and the adenoid fills the cavity, we are frequently called on to clean out this obstructive mass in order to permit adequate nasal breathing and thus maintenance of the feeding program. Good general anesthesia providing complete relaxation of the constrictor muscle is essential for successful elimination of this type of adenoidal obstruction. If the curette is employed it must be used with care in the region of the pharyngeal orifice of the Eustachian tube. After use of the No. 0 LaForce adenotome we prefer direct visualization to ascertain that complete removal has been accomplished, since a small piece of remaining adenoid will interfere with good nasal airway and therefore vitiate the surgery.

2. Hyperplasia of lymphoid tissue on the roof of the flat type nasopharynx presents a difficult problem unless one can visualize this area and carefully nibble away the tissue with an instrument like the Meltzer forceps. It does little good to remove a handful of adenoid from the posterior wall of the nasopharynx and leave a curtain of tissue hanging from the roof obstructing the posterior nares. I do not think that it is possible to rub away this adenoid tissue with a gauze-covered finger. Furthermore the roof of the nasopharynx is a difficult site on which to use a curette effectively. Direct visualization with a speculum and a good light will enable one to see the residual adenoid and remove it with a small biting forceps.

3. Occasionally, a prominent pharyngeal tubercle will present almost an insurmountable obstacle if proper instruments are not available.[4] In this situation, unless a lateral x-ray of the nasopharynx has been taken preoperatively, one is suddenly confronted with the fact that the LaForce instrument rides on top of an osseous peak with unreachable adenoid tissue all around it. Only with a punch forceps and a good palate retractor or nasopharyngeal speculum can one adequately remove the obstructing lymphoid tissue.

4. In spite of a well done adenoidectomy and radiation therapy, one occasionally encounters persistent nasal obstruction and continued ear symptoms. This may be a result of hyperplasia of the salpingo-nasal and salpingo-palatine folds which in some cases may measure 10-15 mm. in width.[15]

You note that these folds extend from the tubal cartilage to the pharynx, palate and to the roof of the nasopharynx. Their distribution is such that when markedly enlarged they may completely obstruct the posterior nares. Under these circumstances the excess lymphoid tissue must be bitten away from the folds.[9] This can be done without too much difficulty and with little bleeding by direct vizualization.

Numerous instruments are available for visualizing the nasopharynx during adenoid surgery. I will only mention the basic work of Gyergyay[10] and Zollner.[21] Very satisfactory palate retractors were developed by Love,[13] Lathrop and Cottle. Gyergyay,[10] Yankauer,[20] and Kelly[12] developed tube or speculum-type instruments.

No one of these instruments has received very wide usage in the past. In recent years our attention has been directed towards an effort to develop an instrument which would be of simple construction, allow good visualization and permit sufficient space through which to operate.

With this in mind, a speculum was devised (Figs. 1 and 2) which we feel utilizes the good features of previous instruments and surmounts some of their objectionable characteristics. It is believed that this speculum will permit the surgeon to operate effectively with good reflected light and reach hitherto inaccessible areas of the nasopharynx. Through the speculum one may readily see the roof of the nasopharynx. In most patients it is an easy matter to visualize the Eustachian orifices and the pharyngeal recesses. It allows one to inspect carefully the bed of the removed adenoid and observe the usual sites of persistent bleeding. Of greatest importance, it allows for careful direct visual examination for residual adenoid tags.

In summary, then, it is felt that the nasopharynx and its contained adenoid tissue is a source of many of the persistent problems which the practitioner is called upon to treat. It is believed that the adenoid may become a potential source of infection and obstruction causing or contributing to nasal congestion, sinus infection, tympanitis, middle ear disease and deafness. For these reasons it is suggested that more and better adenoidectomies receive serious consideration.

A recently developed nasopharyngeal speculum is described which permits direct visualization of the less accessible portions of the nasopharynx. With the aid of such an instrument, it is possible to perform more thorough removal of lymphoid tissue in this area and to make direct examinations of the site of operation.

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A Program of Control and Treatment of Tuberculosis in a Mental Institution

By Henry Duiker, M.D., Arthur L. Stanley, M.D., Harry L. Weitz, M.D., and R. Philip Sheets, M.D.
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THE CARE of mental patients whose disease becomes complicated by the development of tuberculosis, has long been a serious problem. Mental disease, as well as tuberculosis, is chronic and may require long periods of specialized treatment and hospitalization. Lack of sufficient trained personnel, lack of funds, and over-crowded conditions in many of these hospitals have contributed to the difficulties and have increased the hazard of the spread of the infectious disease to one another and to employes.

Tuberculosis has long been rampant in mental hospitals and has been considered as an unfortunate complication about which very little could be done. However, over the years, the passive attitude toward such a complication has changed. Administrators have become aware that the problem is serious and that something has to be done about it. In the past, temporary measures were effected. Patients were literally "dumped" into wards, with no thought given to the status of the infectious disease. In some cases reasonably good nursing and custodial care was overbalanced by large doses of medical neglect.

Michigan prides itself on the type of care given inmates of tuberculosis sanatoria and its mental hospitals. Except for the work done at the Ionia State Hospital, as reported by Isbister et al, no well organized program for the care of tuberculosis in mental institutions has been developed. The problem has long been recognized as a special one at the Traverse City State Hospital. The development of a program of handling this problem at Traverse City will be described herein. The entire program could not have succeeded had not Dr. R. P. Sheets, Superintendent of the hospital, shown excellent insight into the problems involved. His understanding and co-operation made it possible to set up and organize the entire medical and surgical program.

Traverse City State Hospital is representative of other mental institutions in the state. It serves thirty-nine counties of the northern part of the lower peninsula. Since 1942 its capacity has increased from 2,470 to 2,900 beds, without concomitant increase in space. In 1939, Harry L. Weitz, M.D., roentgenologist; and a resident physician, Milton C. Baumann, M.D., with some experience in the handling of tuberculosis, inaugurated an efficient and effective program for the screening and control of tuberculosis. Admission films for all newly admitted patients became compulsory. A card file was set up in the x-ray department, listing all active and inactive cases of tuberculosis. Clinical and laboratory procedures were incorporated with clinical treatment. A follow-up "tickler" file was then set up in order to periodically follow and call in known and suspicious tuberculous patients for re-examination. The effects of this program were immediately recognized, as shown by a definite decrease in the number of cross infections and re-infections.

During the years June 20, 1939, to January 7, 1943, segregation of cases was made on the basis of clinical and x-ray findings. In order to facilitate the handling of tuberculous cases, the files for such cases were printed on red paper or cards. The entire hospital was informed of the significance of these cards, which followed the patient wherever he or she went.

In 1943, the institution was left without anyone particularly trained in tuberculosis treatment. Case recognition and segregation was maintained through the x-ray department. However, the active therapy program gradually depreciated. In 1945, and from 1949 to 1952, inclusive, the Michigan Department of Health has been making a yearly survey of the hospital population with the exception of those patients known to have pulmonary tuberculosis. Accurate records of the number of patients admitted to the tuberculosis ward are not available. However, since 1949, the number of cases has gradually decreased. In the 1952 survey 3,750 x-rays were taken of patients in the hospital, those on Family Care, and personnel. Only two cases of active tuberculosis were found; one in the hospital, and the other on Family Care. This deficient program remained in effect until October, 1950, when the writer, a clinician with experience in tuberculosis, was added to the staff.

The conditions in the wards used for the care of the tuberculous patients, was found to be far from ideal. The structure housing these patients was a long ward on the second floor of a two-story

building. The elevator shaft and stair entry separated the male and female sections. The treatment and dressing rooms were scantily equipped. Each side had seven single rooms, one large ward, one sun room and one combination sun room and ward, which housed a total of eighty-four male and female patients. Patients in the single rooms used stool chairs, while the rest were served by a combination room containing five toilet seats and three wash bowls. Shower baths were given twice weekly in a central shower room. The males were shaved twice weekly in the washroom. The food for the tuberculosis ward was cooked in the main kitchen and transported by food carts and served to the patients on trays. There was no active therapy. Protection to personnel was attained merely by the use of a mask and gowns. Patients requiring fluoroscopy or x-rays had to be transported by car or ambulance to the receiving building.

The initiation and administration of a program for the care of tuberculosis in the mentally ill presented many problems not encountered in a regular sanatorium. It took time to get oriented and to learn how to handle the different types of mental illness. All types and stages of mental disease and tuberculosis were encountered. Many of the ordinary basic principles of medical and hygienic management were impractical. Elastic procedures and regulations had to be improvised for the individual case.

Complete autonomy and control of the patients to be accepted into the tuberculosis ward was insisted upon. Because the wards were overcrowded, and because there were many patients with open tuberculosis, it was deemed essential that no new patients with inactive disease should be unduly exposed to infection or reinfection.

The nursing staff was indoctrinated into the objectives of the new program and instructed in the medical and hygienic management of the tuberculous patient. Since orthodox management was not possible, the doctor and the nursing staff agreed on modifications of the rules and regulations that were to be laid down. Sputum cups and tissues were impractical. Bed rest for the great majority was not attainable. Proper isolation and segregation of the far advanced cavitary tuberculous and the extremely disturbed was difficult because of the limited staff and the large wards. Intermingling of patients in the halls and in the wash and bath rooms was unavoidable.

Intensive laboratory and bacteriological studies were then begun on the doubtful cases. Except for the few more co-operative patients, sputum examinations were considered unreliable. A series of two or three gastric washings was done and sent to the state laboratory in Grand Rapids for culture and animal inoculation.

A new record system was set up and co-ordinated with the system in the x-ray department. The psychiatric behavior and record was reviewed with the course of the patient's tuberculosis. These data were correlated and a course of treatment determined. The cases fell into four broad classes: (1) Mild mental symptoms and arrested or inactive tuberculosis; (2) Arrested or inactive tuberculosis, but with such severe mental symptoms that it seemed unlikely that the patient could leave the hospital; (3) Active disease that seemed amenable to therapy and the possibility of having their sputum converted; and (4) Far advanced cavitary disease that precluded any effective treatment.

A plan of treatment was then outlined. A gradual plan of more effective isolation, as well as medical and hygienic management, was practiced on all. Group (1) cases with arrested tuberculosis and with mild mental disturbance were discharged. Group (2) cases were isolated. Group (3) active cases that were amenable to treatment were given streptomycin and Paraminosalicylic acid. The far advanced group (4) were isolated and treated with antibiotics palliatively.

A gradual but steady improvement was soon noticed. The attendants exhibited an intense interest in what and why things were done and were eager to report helpful observations on ward behavior. They took an increasing interest in individualized attention to patients. They felt more secure in knowing which of the patients were actively infectious; their work became more orderly, directive, and easier. Broad but flexible rules were drawn up regarding smoking habits, intermingling in the halls, isolation and bed rest.

The effects on the patients themselves were even more striking. Shock treatments and deep psychotherapy were not attempted. However, the fact that the patients were seeing a doctor regularly who seemed interested in their problems and was giving their physical ailments personal attention had a marked influence on their morale. Seeing some of their roommates go home, made an amazing change in their behavior. Instead of being resistive to treatment and generally restless, they were surprisingly co-operative and seemed to wel-

come attention. The tangible results of this program were revealing and gratifying.

The intensive bacteriological studies revealed the true status of the activity of their disease. Of the eighty-three patients that were classified as tuberculosis, forty-two were arrested or inactive; thirty-three showed positive sputums or gastrics; and eight were hopelessly far advanced. These figures changed from time to time, since there were a number of reinfections and reactivations due to improper isolation and overcrowding in the beginning. At the end of nine months, the census was reduced from eighty-three to seventy-two. There were nineteen deaths from tuberculosis and other causes. Two epileptics, transfers from Caro State Hospital, were found to be arrested and re-transferred. Six others, proven inactive or arrested, were sent home. Admissions to the tuberculosis ward were reduced because only proven active cases were accepted. There were thirteen new admissions during this period.

Although there was overall improvement in most cases under medical, psychiatric and chemotherapy management, it was apparent that further improvement could only be attained by integrating a surgical program. An agreement was entered into with Arthur L. Stanley, M.D., a thoracic surgeon, of Ingham Sanatorium, Lansing, Michigan. Arrangements were made whereby visits to the Traverse City State Hospital were to be made at regular intervals. At the time of each visit, the scheduled surgery was performed, cases under therapy reviewed, and future surgery decided upon. The Tuberculosis Control Officer, John Isbister, M.D., of the Michigan Department of Health was invited to participate in the program and to attend the therapy conferences.

The surgeon, the tuberculosis officer and the writer then reviewed most of the cases that might require collapse therapy and established the basic general plan of treatment. It was decided that pneumothorax was probably not applicable but that phrenic crush and pneumoperitoneum could be done as a preparatory procedure for subsequent surgery. Thoracoplasty and pulmonary resection were to be used when indicated. Bronchoscopy and bronchograms were performed for diagnostic purposes.

The physical facilities for this new venture were ideal. On the second floor of the Receiving Unit of the hospital is a modern, well equipped operating room, a complete x-ray department, and a six-bed isolation ward that lends itself to pre- and post-operative care of surgical patients. The laboratory and pharmacy are in the basement of this building.

A myriad of details had to be taken care of. A blood bank had to be established; instruments had to be purchased; a member of the hospital staff was trained in giving intratracheal positive pressure anesthesia; the operating room personnel was instructed in the technique of thoracic surgery; twenty-four-hour nursing service was provided in the isolation ward; and the attendants and doctors were instructed in pre- and post-operative care for the surgical patients; and two members of the staff were taught how to give pneumoperitoneum.

The first operative session was on August 16, 1950, at which time Dr. Stanley performed a first stage, three-rib thoracoplasty. A phrenic crush and initiation of a pneumoperitoneum was performed on two patients. Subsequent sessions were at two-week intervals, and on each occasion one or two major procedures were done along with phrenics or bronchoscopies. It was estimated that the main objectives would be reached in eighteen to twenty-four months, but the program proceeded so smoothly that at the end of nine months only a few treatable cases remained. The sessions could then be reduced to two-month intervals. At the end of a year no surgical cases remained except for newly admitted patients. Studies are now under way in order to determine which cases might need additional surgery.

Since the major objective was to eliminate positive sputums, a detailed report will not be given until more time has elapsed. At that time a statistical review will be made with case reports.

To date, eight thoracoplasties have been completed in nineteen separate procedures. One patient with a large cavity and a concomitant silicosis had to be abandoned after the first stage thoracoplasty because of a spread; a phrenic crush and pneumoperitoneum was substituted and he is doing well. This was the only spread of the entire group. Other complications were minor.

Five lobectomies for tuberculosis and one for cystic disease were done without a fatality or serious complication. The only death in the entire series was a severely deteriorated schizophrenic, who, while apparently recovering from a pulmonary decortication and lobectomy, died on the third post-operative day as the result of a cerebral embolus.

Sixteen patients were treated with a phrenic crush and pneumoperitoneum. Of this group, one died of a ruptured duodenal ulcer which had been present for many years, and another died from air embolism.

Even though it is early in the program, a few conclusions can be drawn at this time. The incidence of tuberculosis can be controlled and reduced to a minimum by compulsory admission chest films, yearly surveys of the patient population, and a careful follow up of suspicious cases. Furthermore, even without the complete thoracic surgery facilities, medical and surgical management of the disease can be developed to a point where it will closely approximate that of the most modern sanatoria.

The mentally ill tolerate surgery as well as, or better than, the mentally sound. In the beginning considerable thought was given to a consideration of the type and degree of psychosis that the patient had. Now, psychosis is not a factor in deciding if a given patient is suitable for surgery. All the patients were improved mentally and became very manageable. The severe psychotic patients have shown such phenomenal mental improvement that we welcome the opportunity to operate them. Detailed reports of some of these cases will be given in the subsequent report. The senile psychotics also do surprisingly well.

Two pints of blood are given for each stage of thoracoplasty, and two or three pints after a lobectomy. Two to three liters of intravenous fluids are given concomitantly. Mentally ill patients tolerate pain well, so that it is rarely necessary to administer analgesics after the second day. It is not uncommon for a patient to remark the day after a rib resection, "My arm is a little stiff today." Most patients are up the second or third day after surgery and are eating their full meals. No difficulty has been encountered in giving pneumo refills and all are more tractable than before.

The organization is not complete as yet and many refinements are lacking, especially in physiotherapy and rehabilitation. A more complete arrangement is necessary for specialized psychiatric therapy. There is no inactive ward, so that ground parole and graduated exercises are not possible except in those instances where patients are sent to work wards. Many of these difficulties will be solved when the new 100-bed tuberculosis unit is completed.

The above described regime is economically sound. The initial expense for equipment and training and organizing a team is largely taken care of by the savings made in those who are discharged to their homes. Treating and operating a backlog of cases that has accumulated over a period of years is initially costly. The sustaining program and the treatment of such patients in the early stages of their disease will result in a marked economy to the hospital and state. Our experience, so far, has convinced us that when the next report is made these preliminary conclusions will be verified. Expense can no longer be given as an excuse for neglecting the mentally ill who have developed tuberculosis.

Those in charge of mental health programs can establish a standard program for the control and care of tuberculosis in each hospital, under the direction of a roving phthisiologist, and send those that require specialized treatment to a center that has suitable facilities and an organized therapeutic team. Such an extension program is now being worked out with the Newberry State Hospital.

Medical Directors can no longer shirk their responsibility to offer the tuberculosis patient in the mental hospital humane, scientific, and efficient treatment.

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A DEFINITION

"The Doctor of Medicine is one whose training and outlook are predicated upon the acquisition and use of all available knowledge for the benefit of each individual patient. He makes no effort to lure people to his office. He and his *Profession* are completely responsible for what we know and do regarding sanitation, prevention of disease and public health.

"The cultist is one whose training and outlook are predicated upon some single, narrow, philosophic thesis or assumption. He fits each patient into his narrow band of knowledge and reasoning. He does his best to lure people into his office to increase his *Business.* He contributes nothing to sanitation, preventive medicine, or public health."

Samuel W. Hartwell, M.D., Muskegon

The Scope of Public Health

By Gaylord W. Anderson, M.D., Dr. P. H.
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THE INVITATION to speak before this medical society affords an opportunity to discuss a matter of mutual interest, the question of the scope of public health. This is a matter of constant concern to the physician and public health worker alike. It is not a new matter for we have been discussing it for about a century and, I trust, it will still be discussed for many centuries long after all of us here have faded into the dim memory of the past.

Throughout the history of public health this discussion has brought out two rather distinct schools of thought. The conservative school has had its sincere doubts as to the wisdom of newer developments and the desirability of expansion of the scope of the public health program. At times it has viewed such expansion as the introduction of a philosophy contrary to our traditional way of life and has even raised suspicions as to the basic purposes and intent of those who favored expansion. The progressive school of thought, on the contrary, has advocated new programs of health protection and has often portrayed the conservatives as attempting to stifle progress and trying to preserve the *status quo*. At times it has even viewed the conservatives as motivated too much by self interests and too little by concern for the general public.

These differences of opinion are healthy for they promote discussion. When discussion ceases so does progress. It is unfortunate, however, that too often this discussion has been punctuated by vilification and invectives, which have cast suspicion on fundamental loyalties, personal motives and even upon ancestry. When such discussions are dragged into the political gutter we sacrifice our professional good name and standing and intelligent progress is replaced by mud-slinging which hurts everyone and benefits none. As a physician who has devoted his professional life to public health and who intends to devote the remainder of his life to this same purpose, I recognize that medical practice and public health have a common goal—the welfare of mankind—and I firmly believe that as educated and intelligent human beings we can and should discuss our mutual problems with complete freedom and with complete respect for the motives and integrity of each other. It is with this thought in mind that I should like to discuss this morning the scope of public health as seen by a public health worker.

The need for such a discussion is pointed up by certain trends and events of recent years. On the one hand we have seen the development of public health programs directed at the problems of the degenerative diseases. Many health departments have evolved programs directed at reduction of the high death rate from cancer which we all recognize as one of our leading causes of death. Such programs have often included provision of facilities for diagnosis and treatment. The case-finding concept has been extended in some places to include multiphasic screening programs whereby a supposedly healthy population might be screened for many other types of degenerative conditions. Through such screening unsuspected cases have been found that can be referred to their family physician for proper care. Such programs have been defended as an expression of the health department's obligation to protect the public through attack upon the most important causes of sickness and death—a marshalling of community resources to prevent or postpone physical incapacity and death.

In contrast to this movement, which is an expansion of the scope of public health programs, is the Cline resolution which was adopted at the meeting of the American Medical Association in San Francisco in June 1950 and, by failure of the House of Delegates to make modification as suggested by President Elmer Henderson, essentially reaffirmed in Cleveland that fall. This resolution expressed the conviction that health departments should limit their programs to collection of vital statistics, regulation of the environment, health education, control of communicable diseases, and provision of such laboratory and clinical services as are essential to the effective control of these diseases. The resolution expressly states that other diagnostic and therapeutic services should not be included in the public health program. It thus wipes out the programs for maternal and child health, crippled children, conservation of sight and hearing, school medical and dental services, de-

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generative diseases and mental hygiene. To the extent that it would turn the pages of public health backward a half century, this resolution is a striking example of the conservative point of view in contrast to the views of those who are seeking ways whereby the people, thru their health departments, may find means to reduce the toll from diseases that today constitute the principal causes of death. This resolution, which stands as the official opinion of organized medicine, properly raises again the question as to the scope of public health. To answer this question let us examine the evolution of our present-day public health program.

The primary purpose of and the only excuse for an organized government is the protection of the welfare of its citizens. Whether the factors against which protection is needed be an invading enemy, internal rebellion, fire, famine, or disease, government has in each instance a responsibility that it cannot avoid. This concept has been recognized for centuries and is inherent in our social structure. It has guided all of our community thinking whether in the field of education, commerce, safety or health. The importance of health as one of the community's most valuable assets is equally well recognized. In the middle of the last century Disraeli, that great leader of a capitalistic era, gave emphasis to this concept in the statement that "public health is the foundation upon which rests the happiness of the people and the power of the State. The first duty of a statesman is the care of the public health."

In its earliest form this governmental duty found expression in the many prohibitions that were enacted. Some of these appear to us as rather fantastic attempts to prevent the plagues and pestilences that were the principal public health problems of that day. Yet these enactments placed on firm foundations the concept that the people as a whole have the right to adopt those measures which are necessary for their own protection.

About the middle of the last century there evolved a new orientation toward public responsibility for health that has guided much of our subsequent thinking. When Edwin Chadwick was made secretary of the board to administer the Poor Laws in England he was impressed with the vast sums of money that were being spent to care for those who were incapacitated or left destitute by the ravages of illness that might have been prevented. He naturally inquired if it might not be more logical to finance a program of prevention than to wait until illness had developed and then pour out greater sums for the care of conditions that might have been but were not avoided. If a family is left destitute because of the death of the wage earner, the community must support the dependents. Chadwick postulated, therefore, a responsibility of government for the health of its people, that, if properly performed, would reduce the outlay in grants for welfare aid.

This was not the reasoning of a rattle-brained reformer bent on socialistic experiment and governmental usurpation of all personal rights and prerogatives. It did not come out of any communistic or totalitarian state. It evolved about a century ago in a country that was at the peak of its capitalistic development. It was a concept of pounds and shillings, not of intangible speculation as to human rights to a sound body and a sound mind. If this somewhat mercenary type of reasoning is tempered with humanitarian concepts, we have a philosophy of public health that is of very broad appeal to all classes of society. It is a concept of governmental right and duty to carry out those measures that will reduce both the incidence and unfortunate consequences of illness.

In order to carry out these tasks of protecting the health of the people, a new governmental agency was created, the health department or board. To this agency was entrusted the responsibility of protecting the people against all sources of illness and causes of death. The acts creating these boards gave no suggestion that their activities were to be confined to any narrow segment of the health needs of the people. The act establishing the first state health department in this country, the Massachusetts act of 1869, ordered the department to "take cognizance of the interests of health and life among the citizens." This phrase has been copied either verbatim or in slightly modified form into the health laws of almost every state in the Union. It is a mandate from the people that their legally constituted officials shall do what is necessary to reduce the toll of sickness and of death, and shall carry out a program to prolong efficient human life. There is nothing in this mandate, either specifically stated or implied, that would suggest that the health department should restrict its activities to a certain group of conditions and should at the same time deliberately ignore other important causes of illness and of death.

In the early days sanitation and communicable disease control became the foundations of public health programs because they presented the most urgent and most immediate problems. Filth was then the everyday companion of mankind and infection was rampant. The country was repeatedly swept by waves of smallpox and cholera in comparison with which the 1918 influenza epidemic shrinks into insignificance. Tuberculosis was truly the "captain of the men of death," malaria was widespread even where we now stand and diphtheria was wiping out entire families of children. It was logical, therefore, that the people through their health departments, should have directed first attention to such problems, not because there was any implication that these were to be the be-all and end-all of public health but because these problems were the most urgent.

Yet we recognize that programs to this end did not go unchallenged. The right of the people through their health departments to regulate the environment was repeatedly challenged in the courts, but the people were upheld. Public water supplies and sewage disposal facilities were attacked as socialistic programs which competed unfairly with the private water and sewer companies. When the late Hermann Biggs, then health officer of New York City, proposed the reporting of tuberculosis, he was bitterly castigated by medical societies for his so-called "effrontery" which was viewed as a violation of the profession's right of privileged communication. The construction of public hospitals for the care of the tuberculous was viewed with alarm as an improper governmental activity, and clinics for diphtheria immunization and smallpox vaccination were later challenged as beyond the proper sphere of public health. Step by step measures that we accept today as essential components of our sanitation and communicable disease programs have been challenged by those who feared such activities were beyond the proper scope of public health. Yet they were in all instances merely the fulfillment of the mandate from the people to take such steps as will provide protection from needless illness and death. The health officer could not be faithful to his oath of office if he failed to live up to this mandate from the people to take cognizance of their interests of health and life.

The development of the program for maternal and child health was likewise characterized by differences of opinion as to the proper scope of public health. Many felt that pregnancy was so personal a problem and child health was so much a matter of parental responsibility that they were beyond the scope of government and not matters of public concern. But the people quite obviously felt otherwise. When the United States Public Health Service failed to show proper interest in this field and chose to restrict its activities to what was then the classic field of public health, the Congress established such a program within the Children's Bureau some forty years ago. This act of the Congress was not the expression of some foreign idealism or of any new radicalism of the present day. Rather was it the voice of the people demanding that public health broaden its program to concern itself with the interests of health and life among the mothers and children, regardless of whether these interests were or were not related to the environment and communicable diseases. There was nothing new introduced into the basic concept of public health, merely a shift in program to meet the changing needs of society.

Today public health is in the midst of an expansion into the field of degenerative diseases. The Cline resolution to which I have referred is merely one of the most recent and most sweeping expressions of the inevitable and healthy criticisms of any new movement. It is not, however, the first and I doubt if it will be the last. It can be very simply argued that we do not know how to prevent the degenerative diseases, that there is no evidence of communicability or an important relationship to environment and that therefore these diseases are not within the province of public health. It can be argued that our only known attack upon these conditions is through diagnosis and treatment and that these latter are beyond the scope of public health. Yet the people have spoken otherwise.

In 1926, the Massachusetts legislature ordered the health department to study cancer as a public health problem and to bring in a positive program for attack upon this disease. The department reported that cancer was essentially a personal and not a public problem and not within the scope of public health. The legislature, angered by this failure to produce a constructive program, ordered the health department to establish and maintain clinics and a hospital for the diagnosis and treatment of cancer. When the medical society opposed such a program, the legislature further ordered the department to operate such

clinics "with or without the co-operation of the local physicians."

As a physician I deplore such legislation as an effront to the profession of which I am proud to be a member. Yet as one who believes that democracy has its foundation in the supreme right of the people to protect themselves as they see fit, I see in this legislation a clear-cut statement of the people that they believe that public health is not limited in its scope to any narrow confines but that it includes the degenerative as well as the communicable diseases. Only a few years later the same idea was expressed in slightly different fashion with the enactment of the first federal cancer legislation. This made legislative history in that for the first time in the history of this nation every United States senator affixed his name in advance as a petitioner for the legislation. Again, and on a national level, the people spoke and said very clearly that public health is not narrow in its scope but must be broadened out to direct its attack upon any important cause of illness and of death.

I realize full well that some will see in such a concept the influence of what they consider to be radical—and even alien—social and political philosophies. To the extent that one party has been in power for some twenty years and that those years have seen a rapid growth in the scope of public health, some may see the expression of a political philosophy with which they do not agree. To these may I point out that the Children's Bureau was ardently championed by Theodore Roosevelt and established under the Taft administration. The Shepard-Towner maternal and child health act was passed under the Harding administration. May I further point out that the Massachusetts legislature to which I referred was under strong Republican domination and the bill signed by one of the most conservative Republican governors of the present century. The National Cancer Act had the petitioning signatures of Democrats and Republicans alike. No, this is not partisan legislation, it is not the expression of a new radical, social or political philosophy, it is not an insidious attack upon our democracy by some foreign "ism." It is the voice of the people, regardless of political philosophies, giving new expression to ideas formulated a century ago. It is the people setting forth their right to take action collectively against the ravages and waste of ill health.

What, then, is the scope of public health? Can we define it in somewhat narrow and constrictive terms? I do not believe so. Public health has been given a clear mandate from the people that "it shall take cognizance of the interests of health and life among the citizens." We have long debated the meaning and proper interpretation of this mandate. When we were in doubt the people have interpreted it for us and given it new breadth. They have said clearly that "take cognizance" does not mean passively sitting on the sidelines deploring the loss of human life and tabulating those factors that contribute to such loss. The people have demanded a constructive program of action. At the same time they have said that "the interests of health and life" include all causes that shorten efficient human life, that public health shall concern itself as much with cancer as with cholera. They have given public health a clear mandate of broad public responsibility.

If we must define the scope of public health we may say that it encompasses those measures which people may take collectively to prolong efficient human life. Public health is the tangible expression of the people's right to provide for their interests of health and life. As such it must follow the expressed mandate of the people. If it is loyal to its public trust, public health can follow no other course than to adjust its program to meet the most pressing of our current health problems, to make available to the public the great potential benefits that lie in the discoveries of medical and sanitary science. The scope of public health has grown and is still growing as problems change but there has been no change in the basic governing philosophy of public responsibility. This in turn rests upon the fundamental concept of democracy—a government of the people for the benefit of the people.

In the years that lie ahead, as in the present years, there are bound to be many differences of opinion. New programs will evolve and there will be critics of them. Such criticism will be healthy if it is constructive and is premised upon mutual respect for each other's sincerity, intelligence and integrity. The English have a phrase for the minority party—her Majesty's loyal opposition—a phrase that expresses the concept that the minority party is as essential a part of the government as is the majority and is of equal loyalty. I should like to think of a medical society, when it differs

(Continued on Page 751)

The Use of Oral Metrazol in Psychosis With Cerebral Arteriosclerosis

By Ernest H. Jensen, M.D., and
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FOR MANY years metrazol has been used as a convulsant in the treatment of schizophrenia and the affective psychoses, as a respiratory and cardiac stimulant, and as a diagnostic aid in electroencephalography. Recently, reports have been published indicating that it may be of therapeutic value as an analeptic agent in geriatrics. Chesrow, et al., reported on thirty-two patients who were bedridden and in whom generalized arteriosclerosis, associated with senility, made nursing care difficult. These patients were given oral metrazol, and it was concluded that a significant number of them showed improvement. Their study, however, was merely qualitative, and the criteria of improvement were based solely on clinical opinion.

It has been shown by Freyhan and associates that there is a considerable reduction in cerebral blood flow in arteriosclerotic psychosis. The role of anoxia in the production of mental symptoms such as confusion and emotional lability is becoming more and more recognized, as mentioned by Houston. Accordingly, it was felt that metrazol, (1) by stimulating the respiratory center would improve respiration; (2) it was felt that by its cardiac effect the general circulation would improve; (3) at the same time, the analeptic action of the drug by its cortical stimulation should produce an increased sense of well-being in these patients; and (4) finally, a number of investigators feel that metrazol dilates the cerebral vessels, particularly those of the pia; but these studies have, up to now, not been conclusive.

Metrazol, therefore, has a combination of effects: a stimulant of the cerebral cortex and the medullary centers, especially that of respiration, a possible dilator of the cerebral vessels and a direct tonic effect on the heart muscle with a resulant increase in cardiac output.

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Method of Study

A group of thirty patients was selected. These were all men, ranging in age from sixty-three to ninety-two, with an average age of seventy-seven. The diagnosis in all but one case was psychosis with cerebral arteriosclerosis. The remaining case was one of general paresis, and it was included because we wished to determine whether or not metrazol might have some effect on some of the symptoms produced by the syphilitic endarteritis of the brain. For the most part the patients were free of other diseases at the time therapy was begun, although a few diabetics were included and some of the patients had had episodes of congestive heart failure but were being adequately maintained on digitalis and mercurials. Their psychiatric symptoms varied greatly, in that some were severely deteriorated, while others showed only mild mental changes such as memory loss or confusion.

In an attempt to reduce this study as much as possible to a quantitative scale, a rating system was devised as follows:

Each patient was given a numerical rating, from 1 to 4, for each of the following thirteen points: appearance, personal habits, control of bowels and bladder, sociability towards staff, sociability towards patients, speech content, speech ability, confusion, delusions, hallucinations, appetite, eating habits, and sleeping habits. On the rating scale the number 1 represented relative normality, while number 4 indicated severe disturbance. Each of the above thirteen points was so rated, and these scores were totaled; thus, a score of 13 would indicate normality, while a score of 52 would indicate deterioration almost to a vegetative level.

In order to avoid bias, these ratings were made by ward personnel rather than by the individual physician, who contributed only a clinical opinion at the beginning and at the end of therapy. (Interestingly, it was noted at the end of the study that these clinical opinions coincided with the "scores" given by the personnel of the ward). Each patient was rated on all of the above thirteen points by five to seven of the psychiatric nurses and attendants. The averages of these ratings were considered the final score. The raters were given to understand that some of these patients were to receive placebos, although none actually did. This, we felt, offered a suitable control and again helped prevent bias or prejudice. In those patients who were accessible, psychological testing

TABLE I.

	Before	After		Before	After
Appearance	3.4	3.1	Confusion	3.0	2.4
Personal Habits	3.3	2.9	Delusions	2.0	2.1
Bowel and Bladder	3.0	2.7	Hallucinations	3.6	2.4
Sociability to Staff	3.6	2.2	Appetite	3.4	1.8
Sociability to Patients	4.0	3.8	Eating Habits	2.4	2.5
Speech Content	3.3	2.5	Sleeping Habits	2.1	1.3
Speech Ability	3.5	1.9	TOTAL	40.6	31.2

was done; the tests used were the Bender-Gestalt and the Memory test.

The patients were evaluated four times: at the beginning, in ten days, in twenty days, and at the end of thirty days. The scores thus accummulated were carefully analyzed and were considered reasonably accurate, unprejudiced reflections of the clinical status of the patients at any given time. Accordingly, changes in the scores indicated actual clinical changes, as will be illustrated in the following case history:

L. D., a seventy-two-year-old Polish man, was first admitted to the hospital on June 12, 1947, because of a suicidal attempt. At that time he appeared friendly and co-operative, but in spite of a language barrier it was noted that he was disoriented and confused. The diagnosis of psychosis with cerebral arteriosclerosis was made and the patient was committed. For about a month he continued to be fairly co-operative and was able to get about in his street clothes; but at the end of that time he became noisy, resistive and mute and refused to eat, although he remained tidy. He was given fourteen electroconvulsive treatments, improved markedly and was given a convalescent leave after four months of further hospitalization. He remained out of the hospital for almost two years, but on April 15, 1949, he was readmitted with similar complaints of depression, disorientation, confusion and preoccupation. He failed to improve and therefore was again given two shock treatments in July, 1950; but he became far more withdrawn, denudative, untidy, could not wear his own clothes and required a hospital gown. He remained unchanged and therefore in September of 1950, another series of electroshocks was administered without improvement. From that time on he continued to be immobile, mute, unresponsive, drooling, untidy. He had to be spoonfed and did not walk by himself.

At the time therapy with oral metrazol was begun, he constituted a rather difficult nursing problem. The general physical examination was negative and all laboratory studies were within normal limits.

The patient was given an initial dose of 3 gr. of metrazol four times daily, but after five days of this treatment he developed nausea and vomiting; the drug was discontinued for two days, was then resumed at the same level. Metrazol was continued at this dosage level until the end of the study. The most marked improvement was noted within the first ten days of treatment. During this time the patient, who had formerly remained slumped in his chair, began to sit up straight. He would answer questions asked by nurses and attendants and was no longer untidy. By the time therapy was ended, he was able to sit at a table with other patients and eat his meals by himself; he spontaneously walked alone to the bathroom; and he no longer drooled. The nursing problem had diminished considerably.

To illustrate the correlation between clinical improvement and the method of scoring, Table I is a record of this patient's scores.

Thus it is noted that the total score improved from 40.6 to 31.2, an improvement of about 23 per cent. This bears out the clinical opinion.

Dosage and Side Reactions

Metrazol was made available in 1½ grain tablets and patients were begun on doses of one tablet three times daily. This dose was gradually increased to a final dose of four tablets four times daily, unless side reactions occurred.

In nine of the 30 patients, side effects in the form of nausea and vomiting were noted. These were never serious and subsided when the drug was discontinued for two days; and when therapy was reinstituted at a lower dosage, they did not recur. Ordinarily, the symptoms subsided within eight hours of the last dose. As a general rule, in those patients who exhibited intolerance the level at which toxic symptoms were produced was about two tablets (3 gr.) three times daily. If the patients reached a dosage level beyond this point, toxic symptoms were rarely seen.

In those patients who had shown some evidence of toxicity, maintenance levels were established at a point just below that at which symptoms had occurred. In no case was there a recurrence of symptoms. In those patients who showed no toxic reactions, maintenance doses at the upper limits (as defined above) were given.

In one case, through an accident in the preparation of the medication, a rather large overdose (12 grains) was given. Within approximately one hour the patient had a mild convulsion, followed by

TABLE II.

Case	Score		Case	Score		Case	Score	
	Before	After		Before	After		Before	After
1.	23.2	21.1	11.	25.7	20.4	21.	Expired	
2.	33.8	31.4	12.	32.2	26.4	22.	27.9	21.0
3.	24.6	20.3	13.	27.5	22.6	23.	Expired	
4.	22.0	17.3	14.	26.1	20.4	24.	Expired	
5.	Expired		15.	46.0	35.7	25.	16.8	15.9
6.	40.6	31.2	16.	22.0	15.6	26.	Expired	
7.	32.1	28.6	17.	21.1	21.4	27.	23.1	20.0
8.	23.2	21.0	18.	34.1	40.4	28.	42.1	33.9
9.	20.0	16.1	19.	17.9	17.1	29.	29.8	23.8
10.	21.1	15.1	20.	28.9	24.4	30.	26.9	29.0

another, still milder, about thirty minutes later. These were readily controlled with barbiturates, and no additional effects were noted. The patient was not apparently harmed, and all subsequent laboratory studies, including electrocardiography, failed to show any changes. It may also be noted here that in those patients who showed some side effects, the physical examination and laboratory studies failed to reveal any significant changes.

Results

Clinically, approximately one half of the patients showed considerable improvement. Many had been irritable, feeding problems, asocial, disagreeable, untidy, and often semi-stuporous. In these cases the drug appeared to exert its most profound effect, inasmuch as many of the symptoms disappeared and the patients became much more tractable and easy to care for.

From the standpoint of scores, approximately 20 per cent of the patients showed considerable improvement, while some 40 per cent showed a moderate improvement. Of the remaining twelve patients, five showed no change, five expired, and two continued to deteriorate. One of these last two was the aforementioned paretic, and the other was a severe diabetic.

Psychological Tests

Psychological testing, as mentioned, was performed before and after therapy on those patients who were accessible to such testing. Severely deteriorated patients, obviously, could not be tested.

The results of these tests were equivocal—and showed no significant changes. However, it must be borne in mind that those patients who showed the most clinical improvement were those who were rather severely deteriorated and therefore not amenable to psychological tests. The non-deteriorated individuals showed but little objective clinical improvement, and this fact was reflected in the psychological tests.

Table II will indicate some of the changes in scores.

Summary

Thirty patients were given oral metrazol to determine what effect, if any, it had on cerebral function. Of these, twenty-nine were diagnosed as "psychosis with cerebral arteriosclerosis," and one was a general paretic. They were rated on a numerical scale by various different observers at specified times during the treatment, the average of whose observations was taken as the final score. It was found that in approximately 50 per cent of the patients moderate to marked improvement was noted, while the remainder either failed to improve or continued to deteriorate. Five of the patients in the group expired, but in no case could the deaths be attributed to metrazol, either directly or indirectly. The details of results are shown in accompanying tables.

Conclusions

On the basis of the findings in this group of patients, the following conclusions have been reached:

1. That oral metrazol has a definite place in the therapeutic armamentarium of the institutional psychiatrist.

2. That oral metrazol is probably most efficacious on the more deteriorated patients, having but little effect on others.

3. That oral metrazol has little effect on general paresis.

4. That there is no definite contraindication to its use.

5. That it achieves its maximum benefit in cases of psychosis due to cerebral arteriosclerosis.

6. That it takes full effect within about thirty to fifty days; if there is no effect within that time, none may be expected.

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Emotional Attitudes of the Adolescent

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IN RECENT years much attention has been directed to the emotional problems occurring at the extremes of life. The development of the specialties of pediatrics and geriatrics have to a great extent given impetus to many studies of the psychological processes involved in these two diverse age groups. As critical a period in the inner life of the individual is adolescence. This is a time of conflict and stress for the maturing personality. Indeed, the period of adolescence could well be a special field of study and practice. It demands certainly a solid comprehension of the fields of pediatrics, endocrinology, dermatology, internal medicine and other specialties with reflected problems in developmental psychology. Quite obviously this paper can only touch on other areas of medicine relating to this period. It will concern itself for the most part with the psychosocial problems faced by the adolescent.

The adolescent period is generally conceived as taking place during the "teen" years, from about the thirteenth to the nineteenth year. In actuality, its limit can be more accurately set as occurring from the twelfth to the twenty-first year; although even with this age span, it is quite possible that it may begin somewhat sooner and end somewhat later. Individual variations in emotional and physical development are invariably present. Because of the rapidity and sudden surges of growth during this period, stresses of both a physical and of an emotional character are frequently observed. Puberty, the forerunner of adolescence, brings on sudden physiological and psychological changes. The emotional nourishment as well as the intake of food of proper caloric value received during infancy and early childhood serve as the foundation for the future development of the individual. However, it is in adolescence that fruition of these two factors is first observed.

Definite physical changes take place during this period. In both sexes, the body lengthens, broadens, and becomes heavier. In boys, the chest becomes both deeper and wider, the shoulders expand, the musculature in the extremities develops greater strength, and the voice begins to change. The genitalia become larger. In the case of the girl, her figure assumes the softness and the contours associated with femininity; her hips widen, her breasts become round. The genital organs mature; glandular changes take place. She begins to menstruate. Pubic hair makes its appearance, secondary characteristics develop. In both sexes, surges of physical growth in size and weight occur quite rapidly.

The changes start somewhat earlier in girls than in boys. Initial pubertal differences may start at ten or eleven in some girls but then also may be delayed until fifteen or sixteen. In boys they usually begin between the ages of twelve to sixteen. It must be noted that there exist great individual differences. However, the girl usually begins a rapid growth and gain in weight at about eleven, and is taller and heavier than the boy at twelve or thirteen, and by the age of fifteen has reached full stature. The boy's spurt in height and weight is more likely to begin at about thirteen. It usually carries him past the girl at fourteen or fifteen, and he continues to gain height and considerable weight at seventeen.

Changes in personality and emotional attitudes are no less rapid during adolescence. It is this rapidity of growth itself that makes a marked impact upon both the boy and girl. It was only yesterday that they were children. It was only yesterday that they were almost completely dependent upon their parents for love, protection and guidance. Suddenly they are thrust into a world where they have the physical appearance of an adult yet for the most part retaining a child-like intellectual and emotional comprehension.

It is not a simple step to take the role of an adult in this confused world today. Many factors enter the life of young men and young women to modify their drive for independence. Marriage, for which they are biologically prepared quite early in life, is of economic necessity delayed. Responsibilities which would have been theirs in a simpler environment are not shouldered until later in life. Because of the peculiar socio-economic factors in which they live, a check is placed upon the spontaneous maturation process.

It is in adolescence, nevertheless, that a sudden deepening of comprehension occurs, and with it a host of feelings and desires to respond to the stimuli of the outside world. An insatiable desire for new experiences and adventures drives the adoles-

cent forward. Not only must he find out about things but he must also act. He must go out into the world of real people and establish himself there. It is a world waiting to be conquered, and to the adolescent, he is the one who thinks he can do it.

The boy must prove himself physically competent. He wants to assert his manhood by strength, speed, agility, and intellectual superiority. The girl wants to be lovely, graceful, and attractive. Both sexes feel the need to assert themselves. There is a desire and drive to rid themselves forever of the authority of the parents, and to think and act for themselves. Conflict and rebellion are part and parcel of straining to shake off the shackles of parental domination.

The urge toward becoming an adult, however, continually comes in conflict with an urge to remain a child. The result of this ambivalence is strain, tension, anxiety, and fear. The adolescent does not have the background of experience to give him perspective and ability to make sound judgments. He becomes easily disturbed by insignificant events and reacts out of all proportion to their significance.

Parents are frequently made apprehensive by this apparent instability of the adolescent and tend to increase their restrictions. Where during an earlier period they had gradually gained confidence in their child's judgment, now, during this period of turmoil become not without some justification unsure of this unpredictable person's capacity to evaluate situations. Hence a struggle begins between parent and child. The instability of the adolescent is the inevitable result of psychological confusion which resulted from the ramifications of the biological changes that occurred.

Frequently, the boy or girl tries to make his claim for independence against adult authority, and then hesitates and reverts to childish dependency. Doubts as to the strength and efficacy of his abilities present themselves. He longs to take part in social and community life, yet he shrinks from the responsibility of actually doing so. He doubts the world as he does himself. He loses his childish certainty. The old standards of value no longer hold. At times the sense of disillusionment seems almost overwhelming.

Variations in the development of adolescents, and in the mental, physical and social growth of the individual add still further to the conflict. A boy or girl who is either much taller and more mature looking than his friends or classmates or one who is shorter and more childish in appearance feels "queer" and "different." And often the one who is well developed physically may be immature emotionally. An adolescent who may mature physically very slowly might have the mental development of an adult.

This conflict, a normal accompaniment of adolescence, produces emotional disturbances which explain partially the behavior characteristics of this age period. The adolescent tends to be moody, vacillating, uncertain, unstable, introspective, and to go to extremes. Sometimes the struggle to free himself from emotional dependence leads him to show open hostility and to defy adult authority. Because he is most attached to his parents, and has depended upon them most completely, he may deliberately turn from them and seek counsel and advice from some other person outside the family. Often he idealizes this person as he idealized his childhood heroes. The adolescent may withdraw within himself and take refuge in daydreaming in which like in childhood he creates an ideal world.

Feeling sure of himself in one sphere of life, the adolescent may overemphasize that area and neglect other areas. Thus, he may overwork himself in school or devote himself wholly to sports or to social life. He may exaggerate his social responsibilities; he may overemphasize his importance to the school team; he may suffer great qualms of apprehension over grades in school. Yet, almost always he longs to be "like the rest," like the others of his own age group. He wants to look like them, dress like them, and behave like them.

Strain and tension are found among adolescents in homes of all income levels. They are found where family, school and neighborhood conditions are entirely favorable. Periods of social stress invariably aggravate them. Depressions, wars, and economic unrest make the problem of growth and development more hazardous. Pressures blocking independent behavior but not the urge to independence frequently intensify the strain and conflict. Normally unsure of his own competence and questioning the ethical standards with which he has been raised, the adolescent suffers still further from the loss of confidence in himself and society.

Normally the adolescent should feel from the time of birth the strong and abiding love of his parents. It is his mother and later his father who are the first persons he knows and on whom he is

dependent, whose love gives him faith in himself, and in the world, the faith which is the foundation of his security. When in infancy he gradually becomes aware of the difference between himself and other human beings, it is through returning his mother's love that his emotional drive begins to turn away from himself. It is because of his strong attachment to his parents that he gains a conception of the masculine and feminine roles, and consequently learns to play his own. Through identification with them, he sets standards of behavior and tries to live up to them.

The adolescent needs the opportunity to achieve, for achievement is a fundamental growth need. Born with an insatiable curiosity about the world and with an overflowing energy, he has an impelling urge to act in relation to that world and to master the problems of his environment. He will be able to achieve only if he is given an environment in which he can function; if the experiences have meaning for him; if he is allowed enough freedom to make his own adaptation to that environment, and is not compelled to conform to a rigid pattern of behavior. He needs also some kind of guidance which means assistance—not domination.

The child who has grown up in such a house and community where conditions are favorable will approach adolescence with an inner strength. Though he will be somewhat conflicted, anxious, and uncertain, he will be fortified both by his past achievements and by the fact that he has both given affection and received affection from others. He will not be too dismayed by the responsibilities of approaching adulthood since he has been accustomed to accept responsibility in proportion to his maturity. He will also be disciplined because he has learned to discipline himself, and to delay present gratification for future and more important ends, whose importance he could understand; to subordinate personal desires for the common good since his own interests have been identified with those of others.

Basically, the greatest need for the adolescent is that his parents should understand the nature of the struggle he is making and give him the right kind of assistance. It is necessary that they appreciate both his continued need for guidance and his urge to independence, and be ready to help him when he needs help, yet respecting the fact that he is increasingly trying to think and act like an adult. They should also understand and not criticize his idealism, his often groundless anxieties, his vacillations, and his sometimes bizarre behavior. They should respect his vocational choice even though it might not be their own. They must steadily encourage his attempts to become emotionally independent of them, through his widening social interests, through deepening attachments to other adults, and to other adolescents of his own and opposite sex.

Under these conditions, the adolescent can achieve maturity. When they are absent, when parents, themselves, who are immature seek personal fulfillment through their children, when they cling to them emotionally and exert pressure upon them to follow a course of behavior simply because it seems to them desirable, resisting their attempts to lead their own lives and choose their own friends—then adolescents have a difficult time in growing up. The result of this inability to make a satisfactory adjustment, is generally emotional disturbance. Just as rising temperature or pain are symptomatic of an unusual physical condition, so is the behavior of the adolescent symptomatic of personality disturbance. The individual responds in one of two ways depending on his nature.

If he feels he has the strength to do so, he stands his ground and opposes the environment; if he doubts his strength, he withdraws from it. Those adolescents who oppose the environment, openly defy adults, parents, and teachers. Others refuse to do their school work, truant, quarrel and fight with their brothers, sisters, and classmates or bully younger and weaker boys and girls. These adolescents are seeking to gain a false security in place of the real security which has been denied them. Since the world has seemed wholly unwilling to accord them love or attention or a chance to count, they are trying at least to force it to notice them by the trouble they cause. They are "getting even," trying to assert themselves against domination.

The adolescent who withdraws from the world may shrink into himself and be timid, cold or reserved. Or he may become what adults call "good," be polite, well behaved, or docilely obedient. Often these withdrawn individuals commit acts of surreptitious hostility against those frequently quite weaker than themselves. Sometimes these adolescents indulge in excessive daydreaming, attempting thorough exaggerated phantasies to create an environment which meets their great needs.

Though it may not be realized, these boys and girls are quite as disturbed as those who manifest their symptoms more openly, and are just as much in need of help.

To understand the sexual problems of this period it is necessary that the earlier sexual development of the child be studied. As the young child develops the capacity to deal with the frustrations of his environment, and to find relative security therein, he finds that his emotional energy is not completely expended in meeting his immediate needs. A reservoir of emotional energy remains which finds an outlet in a new capacity to love as well as to seek love. This love may turn in many directions. Because of the great scope of this subject, it will be dealt with more extensively in a forthcoming paper.

Emotional disturbances generally do not manifest themselves suddenly. Since the environments of home, school, and community have, as a rule, been long exerting pressures upon the boy or girl, he has usually presented difficulties much earlier, possibly even in infancy. These difficulties have simply increased with the added strain of adolescence. If he does not receive assistance, the behavior of the boy or girl will clearly reflect the gravity of his condition. The one who was aggressively hostile becomes openly and bitterly antagonistic. In some cases, hostility toward the authority of the adults and other parent figures becomes hostility against the constituted authority, the state.

Severe punishment and ostracism as methods of handling emotional disturbances have had a deleterious effect on both the adolescent and society. For the cause of the disturbance is a belief on the part of these boys and girls that the world is against them, and that they can find no place in it. They have no conception of the reason for this, but vaguely associate it with their own unworthiness. Though they appear to glory in their behavior, they secretly fear both it and society's attitude toward it. Thus to inflict further suffering and humiliation merely confirms them in their belief, and consequently aggravates the disorder and unsocial behavior.

Summary

The emotional problems and the emotional growth occurring during adolescence are closely related to the physical phenomena which occur during this period. Structures, both physiological and psychological, are at this time modified and with these changes a readjustment in personality takes place. Like most upheavals, these changes do not come about without confusion and conflict. Becoming an adult is a battle with much of the end result depending on the emotional ground work and preparation laid in infancy and early childhood.

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7. That the actual effect on cerebral function, as measured by the existing psychological tests, is negligible in the non-deteriorated group who are accessible to testing.

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The Psychosomatic Approach to Convulsive Disorders

A Report From the Michigan Epilepsy Center

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OVER THE past fifteen years, society has begun to look with quickened interest upon a group of its hitherto discarded members, the individuals with a convulsive disorder. Familiar in man's midst since history began, they had always been regarded as a largely hopeless proposition. A few had responded to the therapies of their day which often were more fanciful than scientifically meaningful. But in most cases, the ill-understood seizures which characterized the affliction clung stubbornly to their victims despite treatment.

Although the discovery of the newer anticonvulsant medications in the last two decades opened fresh treatment possibilities, the convulsive individual still occupies a unique and unenviable position among the sick. For example, the employment limitations enforced by the seizures are paradoxically severe as contrasted with many patients' capacities in the seizure-free intervals. This situation alone results in the development of a host of emotional and economic problems. The description of epilepsy as "the last of the hush-hush diseases"[4] dramatically emphasizes the severity of other social stresses upon the epileptic. In addition, the seizures themselves are manifestations of a most serious internal derangement, both in physiologic and psychologic functioning. Faced with this complex interplay of physical and emotional factors originating within and outside his convulsive patient, the physician finds it advantageous to utilize a "psychosomatic approach" in his evaluation and treatment.

The Study of the Whole Person

The psychosomatic approach is a point of view which stresses the fact that the patient with seizures is a total person in whom the functions of the body and of the mind are intimately interrelated. It denies that a patient is merely an efficient conglomerate of physical and emotional units. Indeed, the day has come when the "either-or" concept (either physical or mental disease) is rapidly being abandoned in the management of most illnesses. This holistic approach is indispensable whether it be followed by a single doctor in private practice, by a physician working with his consultants or by a team of specialists in the field of epilepsy. It is this whole epileptic person who is studied by the members of the professional team whose philosophy and method of operation form the basis of this paper.*

The keystones of the psychosomatic approach are the longitudinal and cross-sectional studies. The longitudinal study is a searching review of the patient's entire past life. Hereditary factors, illnesses, injuries, emotional experiences and attitudes, social influences and interpersonal relationships are documented as completely as possible. The patient is studied as a person who has lived in a particular culture, who was born of certain parents and who was reared in a specific constellation of relatives. The impact of physical and psychologic vicissitudes is observed and the after-effects traced in the structure and functioning of the mind and of the physical body.

The patient who presents himself with his symptoms and in his particular life situation is, in reality, ever changing. He is the result of all his earlier experiences up to the moment and is reacting constantly to external and internal influences as he moves forward into his future. Yet, he must be studied as he is in relation to, and as a product of, what he was. Therefore, a cross section of the individual in his present status is taken by the members of the team. An evaluation is made of emotional, social, physiologic and anatomic factors which have current effects on the patient. This data is correlated with the longitudinal study.

Role of Physiologic Medicine

When the psychosomatic approach is made by a team of specialists, it is ordinarily the task of the psychiatric social worker to obtain in its broad-

*The team at the Michigan Epilepsy Center is composed of the following staff members: a neurologist, neurosurgeon, psychiatrist, clinical psychologist, psychiatric social worker and electroencephalographer. When indicated, the assistance of an allergist, pediatrician and endocrinologist is enlisted although these specialists do not function as regular members of the team. The activities of the Center are supported jointly by the United Fund of Michigan and the State Department of Mental Health.

est outlines the historical data which form the basis for the longitudinal study. In certain areas, however, details are filled into the broad structure by colleagues. The neurologist, neurosurgeon and physiologist form the group responsible for the longitudinal and cross-sectional study of the somatic and neural aspects of the person from their genetic origin to their present status.

Throughout the routine of physical examinations and the laboratory studies, care is taken to note any particular interrelationships of factors characteristic of the individual patient. This is a physiologic study of the means by which disturbances in water balance,[5] acid-base balance,[9] carbohydrate metabolism[10] or blood calcium level[11] contribute epileptogenic forces to those generated by organic brain disorders such as diffuse or focal structural changes and variations in cerebral circulation.[13] Appropriate modifications in procedure can be made to study these factors. The electroencephalographic records may be taken under conditions of measured repose, sleep and activation. Specialized techniques such as pneumoencephalography, arteriography and electrocorticography may be employed. The results of the foregoing studies, viewed in the light of earlier hospital and doctors' reports, yield a dynamic picture of the physiologic forces which led to the symptom of seizures and of the changes in these forces brought about by growth and intercurrent diseases. Just as Bridge[3] so ably describes the physiology of the general group of people with seizures, so the team attempts to achieve this description for each patient.

It is a common observation that multiple pathologic factors in different organ systems exert a greater disruptive influence than when the pathology lies in one system alone. In fact, combinations of factors often lead to a single seizure in a person whose life otherwise has no obvious convulsive tendency. This is seen in the febrile convulsion occurring between ages one and three, a phenomenon often associated with a family history of seizures with high fevers. Here genetic trends cooperate with the effects of the physical illness in an incompletely developed brain.

The concept of a threshold for seizures has been used by many writers.[12] It is logical to assume that this threshold is present in every person and that it is partly established by genetic factors. Variations in psychologic and physiologic factors raise or lower the threshold from day to day. In addition, the forces which lead to seizure formation by means other than those which alter the threshold are also variable from day to day. The nature of the threshold is unknown. However, the team is strongly united in the belief that the seizure itself is a state of organic cerebral function potentially present in all human brains. This is illustrated by the production of seizures in all people by the passage of a sufficiently strong electrical current through the brain. This cerebral state may occur at any time and, in fact, can usher a person both into life and out of it.

The team is beginning to find in his physiologic patterns indications of emotional problems in the patient. His electroencephalogram, for example, may suggest trends for passive-dependent strivings. His visceral states may yield signs of anxiety. Even the type of seizure symptom itself may indicate certain personality trends. The patient with psychomotor seizures often shows a tendency to "act out" his conflicts rather than a need to attempt to solve them intrapsychically.

Role of Psychologic Medicine

As mentioned, the interview material obtained by the psychiatric social worker sketches in the longitudinal study. Since it is prepared for the use of representatives from several medical specialities, this history must have multiple foci. An initial evaluation of the epileptic's current status is provided by the worker who has a valuable opportunity to survey the patient in his immediate life setting. The degree of incapacity imposed by the illness and the patient's reaction to this burden are matters of concern throughout the worker's study.

To the review of the development of the patient, the clinical psychologist adds significant data and understanding. The psychologist supplements the findings of the other members of the team through the use of carefully scaled instruments which are used in standardized interviews. The projective techniques, which require that the patient react to unfamiliar stimuli, are especially sensitive. Psychometric testing provides information concerning the patient's present level of intellectual functioning to be compared with a former level. Evidences of conflicts which flourished at earlier stages of development of the personality can be detected, thus giving insight into the nature and significance of problems which are manifested currently. The psychologist is

often in a better position than his co-workers to establish the presence of certain organic defects of the central nervous system and can study the impact of these defects on the personality.[2]

In his evaluation of the convulsive person, the psychiatrist contributes to the longitudinal and cross-sectional studies by a clinical evaluation of the personality. This member of the team is especially interested in the nature of the character structure, in the interpersonal relationships, and in the presenting attitudes and specific problems of the patient. A search is made for emotional factors which may be important in the genesis of the convulsive disorder. The manner of expressing or inhibiting feelings and impulses, particularly those of a hostile nature, is noted. Further, the psychiatrist gives attention to traumatic childhood experiences (such as abandonment, witnessing of violent scenes, or loss of parents by desertion, death or suicide) which may be symbolically re-enacted in the convulsive phenomena proper.

Thus, from the correlated data obtained by the psychologist, psychiatric social worker, and psychiatrist, emerges a picture of the epileptic's psychic life. Attention is immediately drawn to the disrupting effects of the seizures themselves on the emotional adjustment of the patient. The prospect of undergoing a sudden loss of consciousness, accompanied by involuntary thrashing of the arms and legs, hoarse cry and uncontrollable seepage of urine and other body excretions, can hardly be faced with equanimity. A child must learn to control this kind of conduct in the process of his maturation. The reappearance of such behavior during a convulsion often provokes antagonistic feelings in the observers.

The specific emotional reactions of the epileptic to the manifestations of his illness are determined to a large extent by the personality structure of the person suffering the paroxysmal attack. He may, for example, sense the scorn of his associates and become ashamed. He may respond intuitively to their resentment with feelings of guilt. He may withdraw interest and attention from the outside world to be reinvested in himself. He may become anxious lest he express other aggressive feelings. Thus, the emotional problem with which the epileptic struggles is, in part, a "pathoneurosis."[7] This term describes the state of affairs where a physical disorder produces psychologic disturbances. But, on the other hand, psychologic factors may be the ultimate causative forces in seizure formation.

Most students of epilepsy seem to agree that their patients, by and large, are characteristically hostile and egocentric individuals. The convulsive person does not ordinarily form close relationships with other people and his attachments are not enduring. Very frequently he is beset by the urge to destroy and it has been suggested that the destructive impulses are repressed out of the fear of retaliation.[6]

Several authors have shown[1,6,8] that the seizure episode in the "essential" epileptic represents a sudden discharge of a mass of dammed-back affect in an individual with a physiologic predisposition for the convulsive pattern. Observations by the team in a wide variety of cases have led to the extension of this concept to all cases of convulsive disorder, whatever the origin. Examples are noted again and again in the histories given by relatives of convulsive individuals. They describe the patient's mounting tension, moodiness and irritability which warn the family of the imminence of a seizure. The ensuing episode may "clear the air" emotionally for varying periods of time. The release of the contained affect is accomplished in the explosive paroxysm. Isolated instances are known in which adequate seizure control has resulted in acute emotional disturbances. Return of seizures has been followed by an improved emotional state.

Synthesis

Although each member of the team approaches the convulsive patient as a total person throughout the study, his responsibility is discharged primarily in his own field of specialization. Integration of the study occurs in a formal staff conference. It is here that the physiologic and psychologic functions of the individual are considered to be merely two aspects of the fundamental biologic life process. Thus, the several descriptions of the patient merge into a composite, stereoscopic picture of the whole person. The interrelationships between all the epileptogenic forces noted in the longitudinal and cross-sectional studies become more clear. The role and purpose of seizures in the life of the individual person are better understood. He is no longer just another epileptic. The patient stands forth as a sick human being, a man, woman or child who has been forced to adopt the convulsive way of living.

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St. Luke's Hospital Clinico-Pathologic Conference

Edited by J. C. Smith, M.D.
Saginaw, Michigan

THE PATIENT was a white man, fifty-six years old, who was well until two years before admission to the hospital. At that time, he first noted back pain in the lower lumbar region that subsided after taping. The pain recurred and he sought osteopathic treatment. Since that time, the pain has always been present, although there were wide variations in severity. Two months before hospital admission, the back pain became severe and was associated with pain in the chest, neck, left hip, and across both shoulders. During this two-month period, there were also anorexia, a loss of 35 pounds weight, and a mild cough productive of yellow sputum.

The family history and review of systems were not contributory.

Physical examination revealed an emaciated, chronically ill, white male in whom the slightest motion caused acute back pain. The temperature was 98.0 degrees (F.), pulse 110, respirations 26, and blood pressure 138/88 mm. Hg. The head was not remarkable. The neck was supple and there was no enlargement of lymph nodes. Auscultation of the chest revealed loud inspiratory and expiratory wheezes in all parts. The heart was not enlarged, there were no murmurs, and the rhythm was normal. The abdomen was rounded and diffusely and slightly tender. The liver was palpated 3 cm. below the right costal margin. Other organs or masses were not felt. Rectal examination revealed a soft, symmetrical prostate of normal size. The external genitalia and extremities as well as the neurologic examination were normal.

The urine was clear, acid, and of specific gravity 1.022. Examination for Bence-Jones protein was negative. Hematologic examination revealed 7.6 grams of hemoglobin per 100 cc. There were 2,160,000 erythrocytes and 8,200 leukocytes. Differential count of 100 cells revealed 54 segmented granulocytes, 8 band cells, and 39 lymphocytes. The Kahn serologic test was negative. The serum phosphorus was 7 mg. per 100 cc. and the serum acid phosphatase was 1.5 Bodansky units. X-ray examinations were interpreted as showing a normal spine, pelvis, upper gastro-intestinal tract, and colon. Radiographic examination of the chest revealed soft tissue and calcific densities that were, at one time, stated to be suggestive of tuberculosis or histoplasmosis, and at a later time, stated to be not suggestive of those conditions but consistent with asthma. The tuberculin skin test was negative. Culture of sputum for Histoplasma capsulatum was negative after 7 days. Microscopic examination of stained sputum revealed no tumor cells. Examination of sternal bone marrow, done elsewhere, revealed 79 per cent lymphocytes, 11 per cent neutrophiles, 4 per cent blast cells, 3 per cent myelocytes, 2 per cent monocytes, and 1 per cent plasma cells. On the 18th hospital day, abdominal exploration was performed. This revealed a spleen that was estimated to be twice normal size, a slightly enlarged, smooth liver and enlargement and black discoloration of lymph nodes in the gastrohepatic ligament. Biopsy was taken of the liver and one lymph node. Histologic diagnoses included normal liver and chronic lymphadenitis with anthracotic pigmentation.

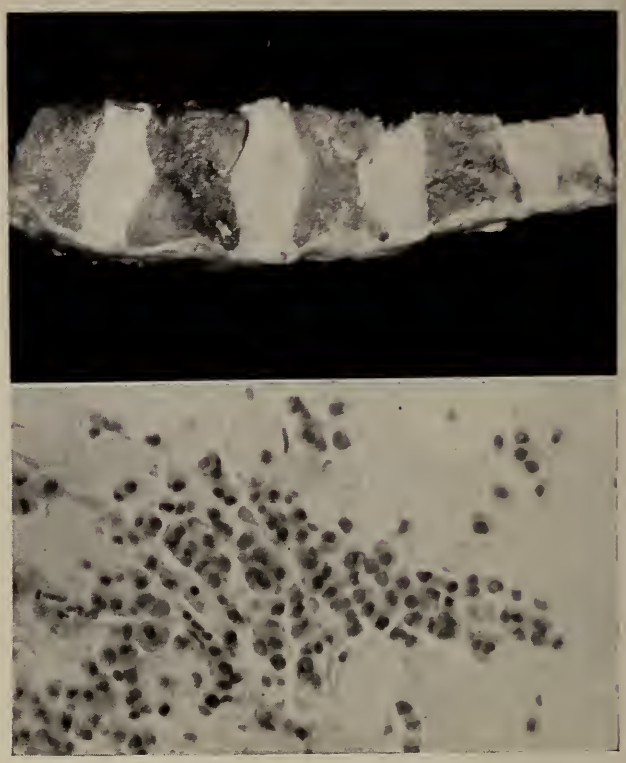


Fig. 1. *(above)* Cut surface of the vertebral column.
Fig. 2. *(below)* Microsection of bone marrow with rows of plasma cells embedded in amyloid.

The patient left the hospital on the forty-seventh hospital day and returned after two weeks. During that interval, x-rays taken elsewhere were stated to show destruction and compression of the sixth and twelfth thoracic and the first and second lumbar vertebrae. His condition, on re-admission, was unchanged except for acute pain over the right costovertebral angle. Biopsy of an inguinal lymph node revealed slight acute and chronic inflammation. The serum calcium and phosphorus were 15 and 4.75 mg. per 100 cc. The serum acid phosphatase was 6 King-Armstrong units. Bence-Jones protein was negative in the urine. The Congo-Red test revealed disappearance of 26 per cent in 1 hour and the dye was not found in the urine. The patient's condition became steadily worse and he died 35 days after the second hospital admission.

Clinical discussion by A. E. Gamon, M.D.

DR. GAMON: Now, I think this problem of making a diagnosis will be by a process of elimination. The patient was a white man of fifty-six years, sick two years with severe skeletal pain, loss of weight of approximately 35

pounds, and cough productive of yellow sputum. The x-ray report states that the lungs are consistent with asthma. The physical examination reveals an emaciated man with a rounded and slightly tender abdomen. The prostate was normal and biopsy of an inguinal lymph node revealed chronic inflammation. Laboratory examinations revealed a pronounced anemia and an elevated blood calcium and serum phosphorus. Toward the end of his hospital course, there was slight elevation of the serum acid phosphatase. It would be most helpful to have a report of his serum proteins and serum alkaline phosphatase as well. Urinalysis was normal and Bence-Jones protein was not found. The bone marrow differential count is most disturbing and I shall comment on that after the x-rays are demonstrated.

Dr. Caumartin: There are irregular calcified foci in both hilar regions that extend into the right base and represent calcified scarring, possibly from tuberculosis or previous fungus infection. These x-rays were taken about 6 months before his last admission and they reveal a normal lumbar spine and pelvis. Then here are radiographs of the spine and pelvis taken five months later and these reveal extensive and diffuse osteolysis of the spine but no sharply localized areas of bone destruction.

Dr. Gamon: It appears here that we are dealing with a malignancy, the origin of which is to be determined. As the most apparent lesions are located in the bones of the spine, three conditions must be given particular attention. The first concerns soft tissue tumors that metastasize to bone, and these include carcinoma of the kidney, thyroid, prostate, and lung. Nowhere in the clinical record is there an indication of kidney or thyroid disease. Prostatic carcinoma must be considered as there was a slight elevation of serum acid phosphatase. However, the osteolytic x-ray appearance of the spine is not consistent with the characteristic osteoblastic type of prostatic metastases. I doubt that this slight serum acid phosphatase elevation is significant although it is known that prostatic malignancy with metastases occurs with a normal serum acid phosphatase. The x-ray appearance of the chest does not suggest bronchiogenic carcinoma and it is apparent that the main complaints were not related to the lungs. In addition, examination of the sputum revealed no tumor cells. Therefore, I shall overlook any of these sites as the probable origin of a malignant tumor in this case. The next consideration concerns malignant disease of the hematopoietic system. These include both lymphocytic leukemia and lymphosarcoma. The only lead indicating either of these conditions is the report of a lymphocytosis of the bone marrow. However, the retained structural pattern in the lymph node that was biopsied, the blood with normal differential counts, and the extensive lesions of the spine make these conditions, in my opinion, most unlikely. In addition, the bone lesions of lymphosarcoma are rarely so extensive or so clearly osteolytic. Therefore, I am reluctant to make a diagnosis of either lymphocytic leukemia, or lymphosarcoma. Lastly, there are the malignant tumors that arise primarily in bone. Paget's disease may be mentioned in this group only to be discarded because of the short history for that condition, the absence of pronounced osteosclerosis, and the serum calcium which is elevated. Osteogenic sarcoma should also be mentioned. However, this condition often affects patients in a younger age group, the bones of the extremities are usually the site of origin, and there is usually proliferation of bone rather than extensive osteolysis. Furthermore, metastases are usually widespread and particularly prominent in the lungs before the primary site reaches such extensive proportions. For these reasons, I am reasonably sure that this is not a case of osteogenic sarcoma.

We come now to multiple myeloma and there is a good deal of evidence in support of this diagnosis. The clinical picture is consistent, with prolonged back pain, loss of weight, and normocytic anemia in an elderly male. The laboratory supplies valuable evidence with increased serum calcium, an increased serum phosphorus and an elevation of serum acid phosphatase. It would be most helpful to have a plasma globulin and a serum alkaline phosphatase determination as there would be an expected elevation in both. The absence of Bence-Jones protein in no way excludes the diagnosis as this substance may be absent or only sporadically present. For this reason, several determinations should be made. Now it is true that the bone lesions of multiple myeloma are usually osteolytic, sharply circumscribed and multiple. However, the process may be osteolytic and of a diffuse nature. When that occurs, the spine is most frequently affected as in this case. Thus some of this evidence supports the diagnosis and all of it is consistent with multiple myeloma. Finally, we have a retention of only 26 per cent of the injected Congo-red dye. This, of course, does not exclude an associated amyloidosis; neither does it indicate its presence. I see no reason to think that there was complicating amyloid disease. Therefore, by a process of elimination, I arrive at the diagnosis of multiple myeloma, after consideration of the clinical, laboratory and radiologic evidence.

Dr. J. C. Smith: How is it that you make a diagnosis of multiple myeloma when the bone marrow report revealed a predominence of lymphocytes?

Dr. A. E. Gamon: I have great difficulty in doing that. However, it is my opinion that the clinical and laboratory data are strongly suggestive of multiple myeloma and hence I reluctantly place less emphasis on that report.

Dr. J. C. Smith: Dr. Siler, we have a case here of severe bone pain, pronounced radiolucent changes in the spine, and an elevated serum acid phosphatase on one occasion. Isn't this consistent with carcinoma of the prostate with widespread metastases?

Dr. D. E. Siler: Yes, it is. However, there are several points that do not exclude this diagnosis but make it unlikely. These include a soft prostate gland of normal size, an osteolytic instead of osteoblastic process in the spine, and only slight elevation of serum acid phosphatase that occurred late in the course of this man's illness. Furthermore, the chest x-rays reveal no metastases in the lungs although there is extensive involvement of the spine. These features make me believe that this condition is something other than carcinoma of the prostate.

Dr. E. F. Kickham: I think sarcomatous degeneration of a Paget's disease of the spine should be considered. This is not uncommon.

Dr. J. C. Smith: Have you ever seen a case of Paget's disease of bone with sarcoma in which the malignant phase was not preceded by a period in which osteosclerosis was conspicuous?

Dr. E. F. Kickham: No.

Dr. J. C. Smith: If there is no further discussion, we shall turn to the anatomic examination.

Dr. Gamon's Diagnosis

Multiple myeloma.

Anatomic Diagnoses

1. Plasma cell myeloma of bone marrow of vertebral column, ribs, and sternum, and of iliac, and mediastinal lymph nodes.

(Continued on Page 778)

Bon Secours Hospital Annual Clinic Day

June 9, 1953

ABSTRACTS OF PAPERS PRESENTED

Tetanus: An Unusual Case

D. N. Sweeny, M.D.

Uterine tetanus following abortion is now a well-established entity. Through 1950, there were 211 cases reported in the available literature with a mortality rate of 76 per cent. Considerable controversy exists as to whether hysterectomy should be done for postabortal tetanus. The case of a twenty-three-year-old criminally aborted patient who developed uterine tetanus is reported. The usual tetanus therapeutic regime was instituted including massive doses of antitoxin, antibiotics, sedation, and adequate nutritional maintenance. Hysterectomy was performed after no improvement was noted with conservative treatment. The patient recovered uneventfully following surgery. It is felt that hysterectomy is indicated in most cases of tetanus in which the uterus is proven to be the site of infection, provided the condition of the patient permits.

Recent Advances in the Understanding and Treatment of Shock

C. J. France, M.D.

Shock may be considered to be acute peripheral circulatory failure characterized by a disparity between the circulating blood volume and the capacity of the vascular bed. Shock may be induced by many different factors such as blood loss, trauma, bacterial toxins, dehydration, cardiac and pulmonary infarction, et cetera. Shock, once induced, may be sustained and intensified by secondary processes, and if untreated continue as a chain reaction until death ensues. The basic defect would appear to be anoxia which allows the release of vaso-depressing humoral and bacterial factors. Therapy is directed toward the prompt restitution of blood volume. Whole blood is by far the most effective agent due to the space-occupying function of the red cell as well as its oxygen carrying capacity. Plasma is also useful, the danger of serum hepatitis having been eliminated by the use of aged liquid plasma. Several plasma expanders have been developed in recent years which effectively increase plasma volume which may be used when blood is not available.

Gamma Globulin—It's Uses Today

I. F. Burton, M.D.

Gamma globulin is produced by the fractionation of plasma proteins. It is almost in pure form and is about twenty-five times more active than that in normal plasma. It contains most, but not all, of the antibody fraction of plasma. Gamma globulin made from pooled plasma shows consistant titres to endemic virus diseases especially measles, infectious hepatitis and poliomyelitis. Its chief value is in the prophylaxis of these diseases. It is of little or no value in the treatment of the actual disease. Gamma globulin prepared from mumps convalescent serum (not the pooled plasma) is effective in the prophylaxis of mumps and the prevention of complications such as orchitis. Gamma globulin may be of value in German Measles. Its use in other virus diseases is as yet not established. The incidence of reactions is small and usually local. Serum hepatitis has not been reported following its use. Its protective action is of short duration lasting two to six weeks.

The Physician, Himself, as a Therapeutic Agent

H. H. Sadler, M.D.

The physician's attitudes, gestures, mannerisms and words sometimes profoundly influence his patients' health. They may add structure to an already existing neurotic framework or, in some instances, create a new pattern. Examples from daily ward rounds are made.

Glaucoma in General Practice

A. D. Beam, M.D.

Early detection of glaucoma depends greatly upon the general practitioner, for often by the time the symptoms have become gross enough to lead the patient to an ophthalmologist, it is already "too late."

This presentation is offered to alert the general practitioner to the glaucoma menace and summarize specific information as to the diagnosis of glaucoma.

Congenital Urologic Lesions in Children

G. W. Sewell, M.D.

The genito-urinary tract is the most common site for congenital anomalies. It is estimated that 35-40 per cent of all congenital abnormalities involve the G-U system.

The most commonly encountered lesions are dis-

cussed emphasizing those causing obstruction and associated pathology. The various signs and symptoms will also be brought out in the discussion. Illustrative cases will be presented showing x-ray findings.

The congenital abnormalities can be grouped into two clinical classifications. Those which are obvious at birth and are easily recognized. This group includes hypospadius, epispadius, patent urachus, and extrophy of the bladder. Some of the problems of management of this group are brought out.

The second group comprises those cases which are not readily obvious and usually involve urinary obstruction. These cases are discovered when the patients develop sepsis. The importance of hematuria and pyuria is emphasized in the discovery of this group. Included in this classification are congenital urethral valves, strictures, vesical neck obstruction, bladder diverticulae, ureterocele, ureteral stricture, ureteral valves and aberant vessels.

The early recognition and correction of these lesions thereby preventing many renal cripples is brought out in the conclusion.

Solitary Cyst of the Kidney

Watson Beach, M.D.

Solitary renal cyst is a comparatively rare disease. Such cysts are generally unilateral and are either serous or hemorrhagic. They arise from the renal cortex and usually project from the surface; they are found in connection with the lower pole, the upper pole and the mid-portion, in that order. The etiology is still theoretical. Very few are malignant. They are found most frequently in the adult, from ages thirty to sixty and very seldom in the young.

It is usually impossible to dissect out the cyst *in toto*. The projecting portion of the cyst is usually resected, the lining treated with cauterization of some type and the defect in the renal surface closed.

A recent case operated at this hospital is of interest for these reasons: A solitary cyst 3.5 cm. in diameter in the right kidney of a girl of seventeen years produced enough distress in the right loin to demand hospitalization and intravenous pyelogram; the cyst was found just above the middle of the kidney projecting from the lateral surface. It was removed *in toto* without rupturing. There were no urinary tract findings or symptoms other than the localized pain and the pyelograms.

One Thousand Appendectomies, a Clinicopathologic Correlation

J. A. Kasper, M.D.

One thousand appendices removed over a period of five years are classified as normal, atrophic, atrophic with fecal obstruction, chronic, chronic recurrent, chronic obliterative, lymphoid hyperplasia, acute catarrhal appendicitis, acute appendicitis, subacute, acute suppurative, acute suppurative with fecal impaction (fecalith), gangrenous with fecal impaction, gangrenous and miscellaneous types, including neoplasms, foreign body inclusion and worm inclusions. These will be correlated with clinical manifestations.

Esophageal Hiatus Hernia

J. B. Hartzell, M.D.

Esophageal hiatus hernia occurs far more frequently than is generally realized. The vast majority are asymptomatic. A few do cause symptoms of sufficient severity to warrant repair. These symptoms may simulate gall-bladder disease or peptic ulcer.

The difficulties encountered in the diagnosis are enumerated, and a new simplified method of repair is described.

Osseous Defects—Lumbo-Sacral Joint

F. J. Kelley, M.D.

The lumbo-sacral joint is designated as the particular site of a variety of osseous defects, which in themselves may not be of great importance but which, when complicated by even slight trauma, can cause severe and possibly incapacitating low back pain. This is due to the fact that in these architectural abnormalities, the articular processes often leave the supportive function of the spine to the ligaments as a substitute, and these latter soon lose their supportive qualities.

Six common abnormalities are illustrated by lantern slides and reviewed as to the mechanical causes for the symptoms produced.

The conclusion has to do with the disposition of those cases which have passed to an unfavorable stage of chronicity rendering conservative treatment futile. It must be realized that these cases comprise a definite pathological entity which, in the patient's best interests, demand consideration of more radical therapy.

Plastic Surgery in Carcinoma of Head and Neck

E. J. Hill, M.D.

No abstract.

Gangrene of the Testicle

I. G. Downer, M.D.

Torsion of the spermatic cord, while not of great frequency, is an important pathological entity demanding early recognition and surgical intervention. It is of interest to note that in one large series of cases reviewed that almost 75 per cent resulted in loss of the testicle. This is seemingly a high toll to be paid for a condition in which rather typical signs and symptoms are present from the onset. The most constant symptoms are sudden onset for severe, unrelenting testicular

pain, frequently accompanied by nausea and vomiting and marked prostration. A history of previous attacks is not infrequently obtained. The exact cause of torsion remains obscure. When torsion is suspected, scrotal exploration should be done immediately. Treatment consists of reduction of the torsion and orchiopexy; if gangrene, orchidectomy. A case report with lantern slides is presented.

Irradiation and Sugical Treatment of Deafness

J. E. Coyle, M.D.

While the majority of cases of deafness are due to cochlear deterioration and thus refractory to treatment, a great number of handicapped patients can be aided by either surgical intervention or irradiation or a combination of the two. The present status of radium therapy is reviewed in the light of recent controversy. The importance of an adequate adenoidectomy is particularly stressed. The fenestration operation is also discussed.

The Newer Concepts of Atherosclerosis

Hugh Stalker, M.D.

Atherosclerosis is the most important among the several disease entities which together comprise the generic grouping arteriosclerosis. At least 90 per cent of all myocardial infarctions are atherosclerotic in origin. Today the long prevalent attitude that atherosclerosis is a physiologic process of aging has been irrevocably rejected.

There are no known substances which have been proven to be causually related to human atherosclerosis although there are many factors which are associated with the development of atherosclerosis in humans. These entities which are found in the serum include cholesterol (free, esterified, and total) lipid phosphorous, total lipids and neutral fats, Sf 10-20 molecules and alpha and beta lipoproteins. One or more of the substances, while not by themselves causally related to atherosclerosis, may actually be a gross reflection of the metabolic error.

It has been well documented that one or more of these chemical entities occur in excessive amounts in the sera of humans who overtly manifest atherosclerosis.

Abnormalities of the Placenta

R. G. Swanson, M.D.

A review of the more common types of placenta and umbilical cord abnormalities including a short discussion of clinical importance and management.

The Surgical Management of Lesions of the Liver and Bile Ducts in Infants and Children

C. D. Benson, M.D.

Lesions of the liver and bile ducts are not of common occurrence in infants and children but their true significance must be realized so that definitive surgery can be performed. A review of lesions of congenital, traumatic and infectious origin will be described and the important diagnostic points will be discussed. The various surgical procedures used will be illustrated by lantern slides.

Roentgen Study of the Acute Abdomen

E. F. Lang, M.D.

Roentgen study by scout films of the patient with an abdominal catastrophe can be done rapidly, simply, and with a minimum of disturbance to the patient. The examination may be of great value in any one of several ways. It may confirm a clinical suspicion, as by disclosing free intraperitoneal air in suspected perforation of a hollow viscus. It may aid in establishing one of two possibilities by exclusion of the other, as when the choice is between ureteral calculus and appendicitis. The examination may present pathognomonic signs of some underlying condition which was not suspected on the basis of clinical evidence, as in a ruptured aortic aneurysm presenting with urinary tract symptoms. The course of a disease as shown by two films made a few hours apart may be decisive in determining the proper therapeutic approach.

The aid which may be anticipated from roentgen study in specific types of acute gastrointestinal, vascular, peritoneal, urological, gynecological, traumatic, and other lesions will be described.

Diagnostic Cerebral Arteriography

G. R. Granger

No abstract.

Some Psychosomatic Aspects of Convulsive Disorders

H. W. Bird, M.D.

The convulsive patient is a total personality in whom psychologic and physiologic functions are intimately inter-related. Not only do the manifestations of the physical disorder produce emotional disturbances, but psychologic factors may also be important in the genesis of the seizures. Recent studies, for example, have shown that the convulsive episode in the "essential" epileptic represents a sudden discharge of dammed-back affect in a predisposed individual. This discharge often "clears the air" psychologically for varying periods of time in the previously disturbed epileptic. The converse is also true. Patients are known to have had their first grand mal convulsion following denial of all natural forms of expression of aggressive feelings. It is necessary to study the personality structure and the specific life experiences of the epileptic to understand the role of emotional forces in seizure formation.

The Big and Little AMA

I have just returned from attending the 102nd Annual Session of the American Medical Association in New York City, the largest medical meeting ever held in what is now the largest city in the world. The registration was approximately 40,000, including 18,000 doctors of medicine, so one can easily sense the immensity of the program.

Attending the meetings of the House of Delegates was one of my privileges. I was impressed with the democratic manner in which the proceedings are conducted, albeit our Michigan delegates offered resolutions, which were favorably acted upon, that will even improve the democratic procedures of the organization. One could also sense that the AMA is assuming its important position as the voice of the profession at large and the private practice of medicine.

Among the notables speaking to the delegates was Oveta Culp Hobby, Director of the Federal Department of Health, Education and Welfare, who reassured us on much of our philosophy of the practice of medicine but also cautioned that there are gaps to be filled and urged expansion of the voluntary health plans that have already assumed such importance in our own state. She assured us that the special assistant in the Department for Health and Medical affairs would be a doctor of medicine.

Despite the greatness of the AMA, I nevertheless am proud to be a member of the Michigan State Medical Society and to be a part of our Annual Session that will be held in Grand Rapids September 23-24-25. You should know that our executive force aids in planning and supervising a state meeting that is second to none—that is frequently called "The Little AMA"—so we shall be looking forward to seeing all of you in Grand Rapids in September.

President's



Message

R. J. Hubbell

President, Michigan
State Medical Society

Editorial

A BUSY ANNUAL SESSION

THE ONE hundred second Annual Session of the American Medical Association was held in New York City, June 1 to 5, 1953. The scientific part of the convention was marked by the largest number of papers ever offered; the finest advanced thought and experience of the profession's leaders in science, research and the art of medicine. The meetings of the sections were crowded. Mostly there was standing room only. The scientific and technical exhibits occupied four floors of the Grand Central Palace.

The most vital part of the convention was the business and official proceedings of the House of Delegates. The American Medical Association is a vast democracy. Delegates are elected from the various states, from the sections and from the Federal services to the number of 185. These men meet formally to transact the business and set the policies of the medical profession. Their devotion to duty and responsibility are testified to by the fact that only four vacancies were recorded. From the states there are also Alternates who serve if Delegates are not present, and most of the states sent their Alternates as well as the Delegates.

In organizing the House fourteen reference committees are appointed to which are referred all resolutions introduced. There are stated times for the sessions of the House of Delegates, after which the reference committees go to work in separate assigned rooms. Any member of the House or of the AMA may appear before these committees and discuss any pending resolutions. The sessions are long, frequently last almost throughout the night, and this continues for four days, until the business of the House is completed.

We may have no fear for the welfare of the profession when all these brilliant, learned and experienced men give of their time and strength to arrive at proper solutions to important questions and policies. To illustrate the procedure let us consider the Michigan Delegation—a typical one. They had numerous caucauses at which all questions which had developed in the House of Delegates were discussed and each man was given full knowledge of the implications. Each morning the Michigan delegation had breakfast at eight to review the past actions and assay the future. With such concentration and devotion the very best interests of the individual practitioner of medicine will prevail.

CALM JUDGMENT

THE FIRST forenoon session of the House of Delegates, June 1, saw over seventy resolutions introduced. These covered many questions and included a few very touchy and controversial topics. The handling of one in particular (Dr. Hawley) impressed us with the ultimate just and proper management of the affairs of the Society. All is well.

Eleven resolutions were presented dealing with publicity regarding unethical conduct of physicians as a result of recent newspaper and magazine articles reporting statements attributed to an official spokesman of an allied medical organization. Hours of hearings, and much newspaper comment resulted in action by the House on a committee recommendation not to adopt any of the resolutions but to reaffirm the American Medical Association Principles of Ethics. The House adopted this statement of principle:

"The Principles of Medical Ethics as formulated, interpreted and applied by the American Medical Association must be considered the only fundamental and controlling application of ethics for the entire profession. . . . Any statement relating to ethical matters by other organizations within the general profession of medicine advances views of only a particular group and is without official sanction of the entire profession as represented by the American Medical Association. . . . The harm done to the public and the profession by the current articles which lower the confidence patients have in their doctors cannot be objectively evalu-

ated. . . . When individuals or groups without official status in the American Medical Association utter or publish ill-considered statements, the result too often is that the confidence of the public in the medical profession is placed in jeopardy. . . . Broad generalizations, ill-advised and poorly prepared statements that often fail to convey the intended meaning are most unfortunate and are to be deplored. Destructive critical comments serve no useful purpose."

We submit this as a masterpiece of statesmanship. Where such a result may follow, we may have no fears. The American Medical profession is in good hands.

RELATIONS BETWEEN OSTEOPATHY AND MEDICINE

THE most controversial subject before the House of Delegates at this session was that presented by the Committee appointed by the Board of Trustees two years ago, to Study the Relations between Osteopathy and Medicine. The report is long and was read in full to the House before going to the Reference Committee. After two hours of spirited debate the House adopted a committee report postponing action until June, 1954, and allowing further study by the delegates and by state associations.

The recommendations of the committee were for further study at the state level, and we believe they should be passed on to the profession for its consideration. They follow:

"1. That the House of Delegates declare that so little of the original concept of osteopathy remains that it does not classify medicine as currently taught in schools of osteopathy as the teaching of 'Cultist' healing.

"2. That the House of Delegates state that pursuant to the objectives and responsibilities of the American Medical Association which are to improve the health and medical care of the American people, it is the policy of the Association to encourage improvement in the undergraduate and postgraduate education of doctors of osteopathy.

"3. That the House of Delegates declare that the relationship of doctors of medicine to doctors of osteopathy is a matter for determination by the state medical associations of the several states and that the state associations be requested to accept this responsibility.

"4. That the Committee for the Study of Relations between Osteopathy and Medicine or a similar committee be established as a continuing body."

The committee report accepted included the following recommendation of the Board of Trustees:

"Because of the length of this report and the controversial nature of the subject, the Board feels that the House should have adequate time for study, and that the state associations should have opportunity to express their opinions. Therefore it is recommended that the Committee be continued, but that action on the report be deferred until the June, 1954, session. It is suggested that at that time the House be prepared to answer the following questions:

"1. Should modern osteopathy be classified as 'cultist' healing?

"2. Since the objectives of the American Medical Association include improvement in undergraduate and postgraduate education should doctors of medicine teach in osteopathic schools?

"3. Should the relationship of doctors of medicine to doctors of osteopathy be a matter of determination by the several state associations?"

June, 1954, is assigned for the official action on this question. For that reason we have felt this statement should be available to our members before the annual session of the Michigan State Medical Society in September.

THE SCOPE OF PUBLIC HEALTH

(Continued from Page 733)

with a program for expansion of the scope of a public health program, as serving in the role of loyal opposition. I am confident that organized medicine and public health are equally loyal to the same high ideals—the promotion of the health and well-being of mankind. I trust that as public health broadens in scope as it is broadening in response to the mandate of the people, we may work out our differences of opinion with full trust and mutual respect for each other.

The Tornado That Tore Flint



Courtesy of *The Flint Journal*

Howling out of the sky, the tornado which struck Flint, Michigan, left a scene of complete devastation. In two minutes Nature on the rampage brought destruction, suffering and death.

(An on-the-spot report made for JMSMS by officers of the Genesee County Medical Society)

On June 8, at 8:34 P.M. a tornado ripped through the north end of Flint cutting a wide swath from west to east through a densely populated area. In its wake were 132 now known dead and hundreds injured.

By 9 p.m. news of the devastation had spread by radio and word of mouth and by 9:15 p.m. doctors were in our hospitals caring for the injured.

A catastrophy of this magnitude produces many heroes; hundreds of everyday people demonstrate the innate goodness of humanity in thousands of little jobs they do. For this reason, it is unfair to single out any one group for meritorious service. But for purposes of this publication the doings of the medical group is recounted for the interest of its readers.

Three Hospitals Became Centers of Mercy

Flint has three general hospitals, and all have open staffs. Department heads serve on a voluntary basis and staff organization exists more on paper than in reality except for resident training. For this reason, doctors were free to go to any one of the hospitals. It was simply amazing how they began to show up without being called and the distribution of personnel was about right considering the voluntary setup.

At this early date (June 9) accurate statistics are not available but it is estimated that at least 500 persons were seen in the three hospitals before daylight. The emergency room became the nerve center of the group. From there patients were sent to x-ray, to an improvised ward for instant

treatment, or immediately to surgery for such things as depressed skull fractures, severe lacerations, crushed chests, et cetera. Many were examined, given minor treatment and sent to an emergency rest ward on cots to await definitive treatment the next day.

One essential policy stands out for all such catastrophes: What can wait until later must wait; the serious case comes first and time must not be devoted to treatment unless it is a life-saving measure at that moment.

Volunteer M.D.'s Organized Swiftly

The following morning found the volunteer staff members in each hospital busy with more definitive care of the hospitalized. Fracture teams began the day-long process of setting, casting, and open reductions. Eye men set about looking closer at eyes, chest surgeons inspected a little closer and found a few more collapsed lungs to re-expand. Urologists looked at bladders and kidneys where injury had been doubtful.

Doctors did not bother with names and addresses and obviously didn't think once of fees. All services were truly volunteered. Many practically worked the clock around.

Flint is grateful for the kind offers of assistance from Doctors in Detroit, Ann Arbor, Jackson, et cetera. There were more than this writer knows about.

Especially wonderful was the way all the other medical personnel worked. Nurses just materialized out of nowhere and went to work. Lab technicians and x-ray technicians from all over the city arrived at the hospitals and just went to work. There was no confusion or fuss—just an efficient crew doing a job that had to be done.

Fractures — Burns — Dirt!

Certainly fractures led in numbers of significant injuries, but one was amazed that nearly every victim was covered with brush burns, and the awful dirt! It was literally blown and ground into the skin as if by a pressure gun.

If you would ask for the "system" used in Flint, it could not be defined. As far as we know, there was no official, pre-assigned post for each doctor, nor for other medical personnel. Yet, somehow each one knew where he could do the most good and went there. After that, it was just the sincere desire to help that made it work. In less than twenty-four hours after disaster struck, doctors were back in their offices practicing medicine and most of the victims were patched up and on the mend.

All Helped

A radio appeal brought blood donors to the hospital in such droves that they clogged halls. Blood letting was continued all night long with a pathologist in charge at each hospital. Over 400 pints were drawn.

High tribute is due the organized first aid groups that actually worked in the disaster area, and the many volunteers who used panel trucks and cars to bring in the injured. These lay people completed the team that cared for the injured.

PSYCHOSOMATIC APPROACH TO CONVULSIVE DISORDERS

(Continued from Page 743)

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Welcome to Grand Rapids

Valuable scientific information with practical and clinical application is a stellar attraction to the hundreds of Michigan and midwestern doctors of medicine who will attend the Michigan State Medical Society Annual Session in Grand Rapids this September.

lind Hotel and the Civic Auditorium in Grand Rapids.

No doctor of medicine wants to miss out on the valuable information available to him in the lecture halls and in the scientific and technical exhibits. There will be 143 technical and scientific



The 88th Annual Session is tailor-made to M.D. specifications. It's Michigan's greatest scientific event.

For three informative and stimulating days—September 23-24-25—a total of twenty-seven scientific medical teachers from every important medical center of the United States will report on the latest in scientific and medical information. The 88th Annual Session will be held at the Pant-

exhibits in the vast Civic Auditorium exhibition hall all displaying the most recent of medical supplies and equipment available to the medical profession.

Amid the scientific events of the three-day meeting a dash of fun is thrown in for good seasoning. The social programs will be of great interest to the doctors and their wives. Officers' Night on Wednesday, September 23, features United States

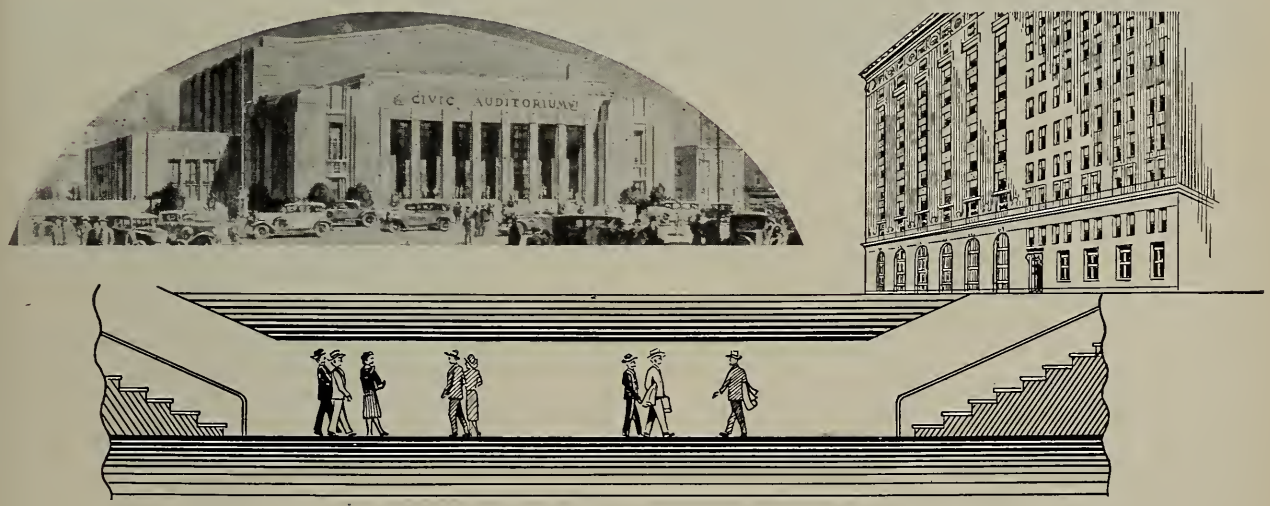
Senator Homer P. Ferguson as the Biddle Lecturer. The following night, Thursday, September 24, the Michigan State Medical Society will be hosts to all registrants and their guests at the State Society Night.

This year the daily Discussion Conferences will be conducted again during the noon period from 12:00 until 1:00 P.M. During this time all of the day's scientific speakers offer the registrants an excellent opportunity to review and discuss the day's scientific events. Thus, these informal events give the visiting M.D.s a chance to pursue further questions for amplification on the topics of the day with the answers coming directly from the outstanding specialists appearing on the day's program.

In addition to the meeting of M.D.s, their wives and medical assistants will hold concurrent meetings in other parts of the Pantlind Hotel. The Woman's Auxiliary to the Michigan State Medical Society has scheduled a three-day meeting—September 23-24-25—to consider the affairs of the Auxiliary. The Michigan State Medical Assistants Society will conduct its Fourth Annual Convention on Wednesday and Thursday, September 23 and 24.

A cordial invitation is extended to all M.D.s in Michigan and the surrounding states to attend and take part in this outstanding medical event of the year. Besides providing a beneficial experience for every medical practitioner, the 88th Annual Session also offers a time of fellowship and a chance to renew old acquaintances.

The valuable information available will benefit you, as a practicing doctor of medicine—and it will benefit your patients. You won't want to miss this



Civic Auditorium Concourse Pantlind Hotel

HOTEL AND MEETING ROOMS ALL UNDER ONE ROOF

Michigan State Medical Society

Past Presidents 1866-1952

1866—*C. M. Stockwell, Port Huron
1867—*J. H. Jerome, Saginaw
1868—*Wm. H. DeCamp, Grand Rapids
1869—*Richard Inglis, Detroit
1870—*I. H. Bartholomew, Lansing
1871—*H. O. Hitchcock, Kalamazoo
1872—*Alonzo B. Palmer, Ann Arbor
1873—*E. W. Jenk, Detroit
1874—*R. C. Kedzie, Lansing
1875—*Wm. Brodie, Detroit
1876—*Abram Sager, Ann Arbor
1877—*Foster Pratt, Kalamazoo
1878—*Ed. Cox, Battle Creek
1879—*George K. Johnson, Grand Rapids
1880—*J. R. Thomas, Bay City
1881—*J. H. Jerome, Saginaw
1882—*Geo. W. Topping, DeWitt
1883—*A. F. Whelan, Hillsdale
1884—*Donald Maclean, Detroit
1885—*E. P. Christian, Wyandotte
1886—*Charles Shepard, Grand Rapids
1887—*T. A. McGraw, Detroit
1888—*S. S. French, Battle Creek
1889—*G. E. Frothingham, Detroit
1890—*L. W. Bliss, Saginaw
1891—*George E. Ranney, Lansing
1892—*Charles J. Lundy, Flint
(Died before taking office)
*Gilbert V. Chamberlain, Flint
(Acting President)
1893—*Eugene Boise, Grand Rapids
1894—*Henry O. Walker, Detroit
1895—*Victor C. Vaughan, Ann Arbor
1896—*Hugh McColl, Lapeer
1897—*Joseph B. Griswold, Grand Rapids
1898—*Ernest L. Shurly, Detroit
1899—*A. W. Alvord, Battle Creek
1900—*P. D. Patterson, Charlotte
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1911—*D. Emmett Welsh, Grand Rapids
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1913—*Guy L. Kiefer, Detroit
1914—*Reuben Peterson, Ann Arbor
1915—*A. W. Hornbogen, Marquette
1916—*Andrew P. Biddle, Detroit
1917—*Andrew P. Biddle, Detroit
1918— Arthur M. Hume, Owosso
1919—*Charles H. Baker, Bay City
1920—*Angus McLean, Detroit
1921—*Wm. J. Kay, Lapeer
1922—*W. T. Dodge, Big Rapids
1923—*Guy L. Connor, Detroit
1924—*C. C. Clancy, Port Huron
1925—*Cyrenus G. Darling, Ann Arbor
1926—*J. B. Jackson, Kalamazoo
1927—*Herbert E. Randall, Flint
1928— Louis J. Hirschman, Detroit
1929— J. D. Brook, Grandville
1930—*Ray C. Stone, Battle Creek
1931—*Carl F. Moll, Flint
1932— J. Milton Robb, Detroit
1933—*George LeFevre, Muskegon
1934—*R. R. Smith, Grand Rapids
1935— Grover C. Penberthy, Detroit
1936—*Henry E. Perry, Newberry
1937— Henry Cook, Flint
1938—Henry A. Luce, Detroit
1939— Burton R. Corbus, Grand Rapids
1940— Paul R. Urmston, Bay City
1941— Henry R. Carstens, Detroit
1942— H. H. Cummings, Ann Arbor
1943— C. R. Keyport, Grayling
1944—*A. S. Brunk, Detroit
1945—*V. M. Moore, Grand Rapids
(Died before taking office)
1945— R. S. Morrish, Flint
1946— Wm. A. Hyland, Grand Rapids
1947—*P. L. Ledwidge, Detroit
1948— E. F. Sladek, Traverse City
1949—Wilfrid Haughey, Battle Creek
(President-for-a-Day, Sept. 21, 1949)
1949—W. E. Barstow, St. Louis
1950—C. E. Umphrey, Detroit
1951—Otto O. Beck, Birmingham
1952—R. L. Novy, Detroit
(President-for-a-Day, Sept. 22, 1952)

*Deceased.

Floor Show—State Society Night

September 24, 1953



Nip Nelson



George West and Maza



Tanya and Biagi

Nip Nelson, the Chicago wit of television, radio and night club, will headline the all-star floor show presented to MSMS Annual Session registrants and their guests in the Ballroom of the Pantlind Hotel, Grand Rapids, Thursday evening, September 24.

Nip Nelson jam-packs several hundred belly-laughs into his forty-minute sketch of impersonations and subtle humor. His act defies adequate description. One must be present to "get" the fast act of Nip Nelson. You'll roar!

Tanya and Biagi, a comedy dance team, experience an alarming series of mishaps, progressing with Biagi's coat ripping apart and beautiful Tanya losing important parts of her stunning wardrobe. Through all this laugh-provoking act, the audience is fully aware of the fine acrobatic and dance style of these two clever and amusing artists.

George West and Maza head a most unique musical comedy, audience participation act. This riotous performance with the aid of a prop piano, musical instruments, and a couple of members of the audience, is sure fire comedy.

Your host will be the Michigan State Medical Society.

Michigan State Medical Society

The 88th Annual Session

CIVIC AUDITORIUM—PANTLIND HOTEL, GRAND RAPIDS, MICHIGAN

September 21, 22, 23, 24, 25, 1953

ANNUAL SESSION INFORMATION

DIRECTORY

Headquarters—Civic Auditorium—Pantlind Hotel, Grand Rapids

Registration—Civic Auditorium Exhibition Hall (see hours below)

Assemblies—Black and Silver Ballroom, Civic Auditorium

House of Delegates—Monday, Tuesday, September 21-22, Pantlind Hotel

Exhibits—Civic Auditorium

Press Room—Room F, Civic Auditorium

Woman's Auxiliary Headquarters—Pantlind Hotel

Michigan State Medical Assistants Society Headquarters—Pantlind Hotel

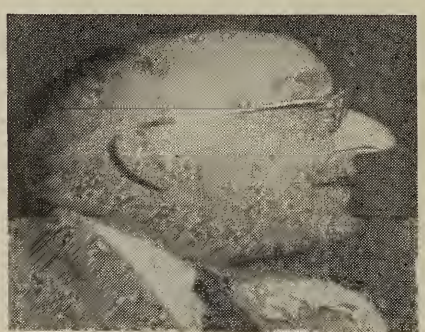
• **REGISTER**—Civic Auditorium—as soon as you arrive.

Hours:

Tuesday, September 22, 1:00 p.m. to 5:00 p.m.
Wednesday, September 23—7:30 a.m. to 5:00 p.m.
Thursday, September 24—8:30 a.m. to 5:00 p.m.
Friday, September 25—8:30 a.m. to 3:30 p.m.

• **NO REGISTRATION FEE FOR MEMBERS OF MSMS AND OTHER STATE MEDICAL ASSOCIATIONS, AMA, AND CANADIAN MEDICAL ASSOCIATION.**

Admission will be by badge only to all Scientific Assemblies, Section Meetings, Discussion Conferences and the Exhibition. Please present your MSMS or other State Medical Association, AMA, or CMA Membership card to expedite your registration. We wish to save your time.



MSMS Secretary L. Fernald Foster, M.D., Bay City, as "fun-processed" by his friend, C. L. A. Oden, M.D., Muskegon.

* * *

• **GUESTS**—Members of any state medical association, AMA, or CMA members from any province of Canada, and physicians of the Army, Navy and U. S. Public Health Service are invited to attend, as guests. No registration fee. Present credentials at the Registration Desk.

Bona fide doctors of medicine serving as residents, interns, or who are associate or probationary members of Michigan county medical societies, if vouched for by an MSMS Councilor or the president or secretary of the county medical society in whose jurisdiction they practice, will be registered as guests. Present credentials at the Registration Desk.

* * *

• **MICHIGAN DOCTORS OF MEDICINE**, in practice but who are not members of MSMS, if listed in the American Medical Directory, may register as guests upon payment of $25.00. This amount will be credited to them as dues in the Michigan State Medical Society FOR THE BALANCE OF 1953 ONLY, provided they subsequently are accepted as members by the County Medical Society in whose jurisdiction they practice.

* * *

• **DOCTOR**, register Tuesday! Registration of physicians will be held Tuesday afternoon from 1:00 to 5:00 p.m.—as well as on Wednesday, Thursday, Friday, during the 1953 MSMS Annual Session. The Tuesday afternoon registration hours are arranged so that physicians may avoid waiting in line Wednesday morning before the opening Assembly.

We recommend to Grand Rapids physicians—and those who arrive in Grand Rapids on Tuesday—that they register Tuesday, September 22, from 1:00 to 5:00 p.m., Civic Auditorium.

* * *

• **TELEPHONE SERVICE**—Special lines to handle local and long distance telephone service for registrants at the MSMS meeting are available in the Civic Auditorium just outside the Black and Silver Ballroom Glendale 1-9213, Glendale 1-9751, Glendale 1-9156. To contact the Exhibit Hall, call: Glendale 1-9145, Glendale 1-9403, Glendale 1-9738. The telephone number at the Pantlind Hotel is 9-7201.

* * *

• **GUEST ESSAYISTS** are very respectfully requested not to change time of their lecture with another speaker without the approval of the Assembly. This request is made in order to avoid confusion and disappointment on the part of some members of the audience.

NEW INFORMATION IN THE HUGE EXHIBIT—Many items of interest or education will be found in the large exhibit of 143 scientific and technical displays. The Exhibit Section at MSMS Annual Sessions is as important, informative and desirable to most doctors of medicine as the scientific papers presented in the Assembly room. Doctor, stop at every booth—you'll be surprised how much you'll learn! No high-pressure salesman but a courteous well-informed exhibitor will greet you and supply you with some valuable information helpful to your patients.

- **CHECK ROOM**—Both in Civic Auditorium and Pantlind Hotel.

* * *

- **PUBLIC MEETING** — The evening Assembly of Wednesday, September 23—Officers Night—will be open to the public. Invite your patients and other lay friends to this entertaining meeting, to be held in the Black and Silver Ballroom of the Civic Auditorium at 8:30 p.m. Program on page 764.

* * *

- **CABARET-STYLE DANCE AND FLOOR SHOW**, with the compliments of the Michigan State Medical Society, will be held in the Ballroom of the Pantlind Hotel at 10:30 p.m. All who register, and their ladies, will receive a card of admission and are cordially invited to attend.

* * *

- **TRANSPORTATION**—The C & O Streamliners afford a convenient means of transportation to the MSMS Annual Session in Grand Rapids for hundreds of physicians located in the southeastern and Central parts of the State.

* * *

- **PARKING**—Metered parking on the streets surrounding the Pantlind Hotel and Civic Auditorium. Outside lots are available as follows:
  1. Rear of Rowe Hotel (two blocks from Pantlind Hotel).
  2. Campau Avenue parking lot (one and one-half blocks from Civic Auditorium).

* * *

- **THE ANNUAL COMMITTEE ORGANIZATION** luncheon, a meeting of MSMS committee chairmen appointed by President-Elect L. W. Hull, M.D., Detroit, to serve during the year 1953-54, will be held on Thursday, September 24, in the Sadler Lounge, Pantlind Hotel, at 12:30 p.m.

* * *

- **POSTGRADUATE CREDITS** are given to every MSMS member who attends the Annual Session.

SECTION MEETINGS—on Wednesday-Thursday-Friday, September 23-24-25, immediately following adjournment of the daily Assembly.

WEDNESDAY, SEPTEMBER 23, 5:00 to 6:00 p.m. The following Sections will meet: Nervous and Mental Diseases; Ophthalmology; Pediatrics; Surgery; and Urology.

THURSDAY, SEPTEMBER 24, 5:00 to 6:00 p.m. The following Sections will meet: Gastroenterology and Proctology; General Practice; Obstetrics-Gynecology; and Otolaryngology.

FRIDAY, SEPTEMBER 25, 5:00 to 6:00 p.m. The following Sections will meet: Dermatology and Syphilology; Medicine; Pathology; Public Health and Preventive Medicine, and Radiology.

- **THE 143 TECHNICAL AND SCIENTIFIC EXHIBITS**—The Scientific and Technical displays will open daily at 8:30 a.m. and close at 5:15 p.m., except on Friday when the break-up is at 3:30 p.m. Frequent intermissions to view the educational exhibits have been arranged before, during, and after the Assemblies.

* * *

- **THE MSMS HOUSE OF DELEGATES** convenes Monday, September 21, at 10:00 a.m., Ballroom, Pantlind Hotel; it will hold three meetings on Monday, September 21, at 10:00 a.m., 2:00 p.m. and at 8:00 p.m.; also two meetings on Tuesday, September 22, at 9:30 a.m. and at 8:00 p.m.

PRE-REGISTRATION OF DELEGATES WILL BE HELD SUNDAY, SEPTEMBER 20, FROM 8:00 TO 10:00 P.M. PLEASE REGISTER IN ADVANCE AND SPARE YOURSELF STANDING IN LINE MONDAY MORNING.

* * *

- **W. C. BEETS, M.D.**, Grand Rapids, is General Chairman of Arrangements for the 1953 MSMS Annual Session in Grand Rapids.
  The Scientific Press Relations Committee is composed of: C. A. Payne, M.D., Chairman, F. C. Brace, M.D., H. G. Benjamin, M.D., and P. W. Kniskern, M.D., all of Grand Rapids.

INFORMATION OF PRACTICAL VALUE IN DAILY PRACTICE will be found at the Michigan State Medical Society Annual Session. All subjects on the MSMS Annual Session Program are applicable to clinical medicine. They stress diagnosis and treatment, usable in everyday practice.

- **PAPERS WILL BEGIN AND END ON TIME**—Believing there is nothing which makes a scientific meeting more attractive than by-the-clock promptness and regularity, all meetings will open exactly on time, all speakers will be required to begin their papers exactly on time and to close exactly on time in accordance with the schedule in the program. All who attend the meeting, therefore, are requested to assist in attaining this end by noting the schedule carefully and being in attendance accordingly. Any member who arrives five minutes late to hear any particular paper will miss exactly five minutes of that paper!

* * *

"Surgical Block" Wednesday morning—the four Assembly periods of Wednesday morning, September 23, will be devoted to surgical subjects. This "Surgical Block" will complement the program arranged by the newly formed Michigan Chapter, American College of Surgeons which will hold its initial meeting on Tuesday afternoon, September 22, to coincide with the MSMS Annual Session.

The Surgical Section will meet Wednesday at 5:00 p.m. in the Black and Silver Ballroom, Civic Auditorium.

* * *

"General Practice Day"—Thursday, September 24, 1953. The Assembly subjects on the second day of the MSMS Annual Session are beamed to general practitioners. The General Practice Section meets Thursday at 5:00 p.m. in the Black and Silver Ballroom, Civic Auditorium.

The Day will be further featured by the presence in Grand Rapids of U. R. Bryner, M.D., Salt Lake City, President of the American Academy of General Practice—who will address the Michigan Academy of General Practice at its dinner meeting Thursday evening.

THREE DISCUSSION CONFERENCES

Three quiz periods will be held Wednesday-Thursday-Friday, September 23-24-25, Black and Silver Ballroom, Civic Auditorium, 12:00 noon to 1:00 p.m. with all the guest speakers of the day on the platform.

An opportunity to ask questions concerning the presentations of the guest essayists, or to discuss an interesting case with them, is provided at these Discussion Conferences.

A CONCENTRATED THREE-DAY POSTGRADUATE COURSE—A CAPSULE OF GREAT VALUE TO THE MICHIGAN PRACTITIONER OF MEDICINE—THAT'S THE MSMS ANNUAL SESSION OF 1953.

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The First Beaumont Lecture of the Michigan State Medical Society, Friday, September 25: recently created by The Council of the Michigan State Medical Society, the premiere MSMS Beaumont Lecture will be presented by J. A. Bargen, M.D., Rochester, Minnesota, on Friday, September 25 at 9:00 a.m. Dr. Bargen's subject will be: "Problems of Nutrition in Ulcerative Conditions of the Digestive Tract."

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• MEETINGS OF SPECIAL SOCIETIES, ALUMNI AND AUXILIARY GROUPS

Tuesday, September 22, 1953

1. **Michigan Chapter American College of Surgeons**, 2:00 p.m., Scientific program, Kent State Room; 5:00 p.m. cocktails, Continental Room: 7:00 p.m. dinner, Kent State Room.

2. **The Michigan Branch of the American Academy of Pediatrics** will hold a meeting Tuesday, September 22, beginning at 9:00 a.m. The morning scientific meeting will be a clinical conference at Blodgett Hospital, Grand Rapids. Dietetic lectures will be presented in the afternoon in the Schubert Room, Pantlind Hotel, 2:00 p.m.

   Sidney Farber, M.D., Boston, will present a talk entitled "The Management of Malignancies in Childhood."

   There will be reception at 5:30 p.m. in the Sadler Lounge honoring Doctor Farber. Dinner at 6:30 p.m. in the Schubert Room of the Pantlind Hotel.

   Sponsors of the afternoon program and of the cocktail party and dinner are the Baker's Laboratories of Cleveland and Gerber Products Company of Fremont, Michigan.

Wednesday, September 23, 1953

3. **The Michigan Chapter, American College of Chest Physicians** will hold a dinner-meeting in Room 328 of the Pantlind Hotel beginning at 6:30 p.m.

4. **The Detroit Branch of the American Urological Society** will meet jointly with the MSMS Section on Urology beginning at 5:00 p.m. in Rooms D and E in the Civic Auditorium followed by a social hour and dinner at 6:00 p.m. in the Schubert Room, Pantlind Hotel.

5. **The Michigan Association of Alpha Kappa Kappa** will hold its annual meeting in Rooms 323-325, Pantlind Hotel, starting with cocktails at 5:30 p.m. and dinner at 6:30 p.m.

6. **The Michigan Society of Neurology and Psychiatry** will meet for cocktails at 6:00 p.m. in Room 327, followed by dinner at 6:30 p.m. in Room 222, Pantlind Hotel. O. Spurgeon English, M.D., of Philadelphia will be guest speaker.

7. **The MSMS Section on Ophthalmology** will hold a dinner-meeting beginning at 6:30 p.m. in Rooms 322-324, Pantlind Hotel.

Thursday, September 24, 1953

8. **The Michigan Academy of General Practice** will meet at 6:00 p.m. for cocktails with dinner at 7:00 p.m in the Continental Room, Pantlind Hotel. U. R. Bryner, M.D., of Salt Lake City, Utah, President of the American Academy of General Practice, will be guest speaker at this dinner-meeting.

9. **The Michigan Chapter of the Arthritis and Rheumatism Foundation** will meet for cocktails at 6:30 p.m. in Room 328 followed by a dinner meeting at 7:30 p.m. in Room 327, Pantlind Hotel. All members of the Chapter's Medical Advisory Committee are cordially invited to attend.

10. **The Wayne University College of Medicine Alumni Association** will hold an alumni banquet in the Schubert Room of the Pantlind Hotel at 6:00 p.m. Alumni, their wives and guests are cordially invited to attend. Tickets will be available at the Wayne University scientific exhibit booth. Dean Gordon H. Scott, Ph.D., Detroit, will give a report for the Medical School to the alumni. Don F. Strohschein, M.D., Detroit, will be chairman of the banquet program which will be dismissed in time for the alumni to attend the State Society Night entertainment. A Wayne University Alumni headquarters suite will be maintained in the Pantlind Hotel during the Annual Session.

11. **Upper Peninsula Day** is scheduled for 6:30 p.m. (cocktails) followed by dinner at 7:30 p.m. in The Sadler Lounge of the Pantlind Hotel.

12. **The Michigan and Detroit Proctologic Society** will hold a dinner-meeting at 6:00 p.m. in Rooms 322-324, Pantlind Hotel.

13. **The Michigan Diabetes Association** will meet for cocktails at 6:30 p.m. in Room 323 followed by dinner at 7:30 p.m. in Room 325.

Friday, September 25, 1953

14. **The Michigan Pathological Society** will meet at 3:00 p.m. in the Continental Room, Pantlind Hotel, and for dinner at 6:00 p.m. in the Sadler Lounge, Pantlind Hotel.

Women's Organizations

15. **The Woman's Auxiliary to the Michigan State Medical Society** will meet as follows:

September 21, 22, 23, 1953

Headquarters, Hotel Pantlind, Grand Rapids, Michigan

(Registration from 10:00 A.M. Tuesday through Thursday noon on Mezzanine)

MONDAY—September 21

P.M.
6:30 Finance Committee Dinner meeting—President's suite

TUESDAY—September 22

P.M.
6:30 Organization Dinner for Retiring and Incoming Directors and President Elect, Schubert Room, Pantlind Hotel
6:30 Past Presidents' and Secretaries' Dinner, Peninsular Club

WEDNESDAY—September 23

A.M.
9:30 Pre-Convention Board Meeting—Red Room, Civic Auditorium (for 1952-53 State Officers, Directors, State Chairmen and County Presidents)
10:30 Annual Two-day Session opens, Red Room, Civic Auditorium, Mrs. William Mackersie, President, presiding

P.M.
12:30 Luncheon, honoring Past State Presidents, Kent State Room, Pantlind Hotel
2:30 Resume General Session
4:00 Business adjourned until 9:00 Thursday
6:00 Annual Banquet, Kent State Room, Hotel Pantlind. (Dress Informal) Husbands cordially invited. Official representatives of MSMS will be our guests
8:30 MSMS Officers' Night. Biddle Lecture

THURSDAY—September 24

A.M.
9:00 Resume General Session of Annual Convention, including Election of Officers
12:00 M Annual Luncheon, Kent State Room, Hotel Pantlind. Speaker—Mrs. Leo J. Schaefer, President, Woman's Auxiliary to the AMA
Installation of Officers

P.M.
2:30 Adjournment
3:00-4:00 Post-Convention Board Meeting, Mrs. Walter S. Stinson presiding.
(For 1953-54 Officers, Directors, State Chairmen and County Presidents)
10:30 MSMS State Society Night—Floor show and dancing

16. **The Michigan State Medical Assistants Society Convention** will meet in the Pantlind Hotel, Grand Rapids, September 23 and 24, 1953.

WEDNESDAY—September 23

A.M.
9:00 Registration at Pantlind Hotel
9:30 MSMAS Executive Committee Board Meeting
10:00 "Cancer"
Luther C. Carpenter, M.D., F.A.C.S., Grand Rapids
10:45 "Poliomyelitis"
David G. Dickinson, M.D., Director, National Foundation for Poliomyelitis, Washington, D. C.
11:30 "Legal Aspects in Medicine"
William A. Perkins, LL.B., Grand Rapids

P.M.
12:30 Luncheon, Ball Room, Hostess, Miss Ann Drolen, Kalamazoo, sponsored by Michigan Medical Service
2:00 Annual Business Meeting and Election of Officers
4:30 View Exhibits
6:00-7:00 Cocktail Hour—Mezzanine
Sponsored by Professional Management of Battle Creek
7:30 Banquet, Ball Room, Hostess: Mrs. Charlotte Ash, Kalamazoo; "Your Attitude and You," A. E. Schneider, Ph.D., Professor of Education, Head of Business Department, Western Michigan College

THURSDAY—September 24

A.M.
9:00 Registration at Pantlind Hotel
10:00 "X-ray and X-ray Therapy"
Edwin O. Pearson, M.D., Kalamazoo
11:00 "Tuberculosis"
Anthony F. Stiller, M.D., Pine Crest Sanatorium, Oshtemo

P.M.
12:30 President's Luncheon—Schubert Room
Hostess: Mrs. Lorraine Burgess, Grand Rapids Style Show
2:00 "History of Medicine"
Dr. Harvey M. Merker, Consultant in Pharmaceutical and Chemical Manufacturing, Parke, Davis & Company
4:30 View Exhibits
10:30 MSMS State Society Night—Floor Show

DATES TO REMEMBER

March 9, 1954—SECOND ANNUAL MEETING, MICHIGAN CHAPTER OF THE AMERICAN COLLEGE OF SURGEONS

March 10-12, 1954—EIGHTH MICHIGAN CLINICAL INSTITUTE
Both at
Sheraton-Cadillac Hotel
Detroit

September, 1954—EIGHTY-NINTH ANNUAL SESSION, MICHIGAN STATE MEDICAL SOCIETY
Sheraton-Cadillac Hotel
Detroit

MICHIGAN STATE MEDICAL SOCIETY

The 88th Annual Session

PANTLIND HOTEL, GRAND RAPIDS, SEPTEMBER 21-22, 1953

Program of Assemblies and Sections

WEDNESDAY MORNING

September 23, 1953

First Assembly

Black and Silver Ballroom, Civic Auditorium, Grand Rapids

Chairman: W. A. Hyland, M.D., Grand Rapids
Secretary: J. M. Wellman, M.D., Lansing

SURGICAL BLOCK

A.M.
9:00 **"The Development and Management of Gastrointestinal Distention"**

Walter G. Maddock, M.D., Chicago, Illinois
Professor of Surgery, Northwestern Medical School; Chairman, Department of Surgery, Wesley Memorial Hospital

9:30 **"The Place of Radioactive Isotopes in Clinical Practice"**

William D. Holden, M.D., Cleveland, Ohio
Oliver T. Payne, Professor of Surgery, Western Reserve University School of Medicine; Director of Surgery, University Hospitals of Cleveland

The tremendous amount of activity in research institutions that has centered around the acquisition of information concerning radioactive isotopes has left the practicing physician and surgeon in a state of bewilderment concerning the applicability, usefulness, danger, and cost of isotopes. Knowledge has accumulated at the present time so that it is known that some disease states can be more satisfactorily diagnosed and treated by utilizing certain isotopes. Others that may ultimately be of proven value in clinical practice are still in a stage of experimental development. Some of these problems will be discussed in an attempt to clarify ambiguous concepts concerning the use of radioactive isotopes. The many and varied uses of radioactive iodine in diagnosis and therapy will be discussed.

10:00 INTERMISSION TO VIEW EXHIBITS

11:00 **"The Treatment of the Severely Burned"**
Everett I. Evans, M.D., Richmond, Virginia
Professor of Surgery and Director, Laboratory for Surgical Research, Medical College of Virginia

11:30 **"Clinical Use of Testosterone"**

Frank Hinman, Jr., M.D., San Francisco, California
Assistant Clinical Professor of Urology, University of California School of Medicine, San Francisco

The actions of the male sex hormone are plain to see in certain experiments of nature. The boy with a Leydig cell tumor is virile and mature. The girl with congenital adrenal hyperplasia has many male characteristics. Adrenal cortical tumors, too, illustrate effects of large doses of androgens in women. These patients demonstrate also some of the dangers of over-dosage.

Testosterone has many clinical uses. In sterility, its use to suppress spermatogenesis is exploited by waiting for a post-treatment "rebound." For female urethritis, it adds another approach to the therapy of the concomitant senile vaginitis. And of prime value is the use of testosterone as replacement therapy for eunuchoidism and delayed puberty. Even its use in the male climacteric is justified under certain circumstances.

12:00 END OF FIRST ASSEMBLY

WEDNESDAY NOON

(No Luncheons)

September 23, 1953

12:00 to 1:00 p.m.

DISCUSSION CONFERENCE

Black and Silver Ballroom, Civic Auditorium

Leader: R. W. Buxton, M.D., Ann Arbor
Participants: Wm. L. Benedict, M.D., Rochester, Minn.; O. Spurgeon English, M.D., Philadelphia; Everett I. Evans, M.D., Richmond, Virginia; David P. Finley, M.D., Omaha, Neb.; Frank Hinman, Jr., M.D., San Francisco; William D. Holden, M.D., Cleveland; Walter G. Maddock, M.D., Chicago; and Leo M. Taran, M.D., Roslyn, N. Y.

WEDNESDAY AFTERNOON

September 23, 1953

Second Assembly

Black and Silver Ballroom, Civic Auditorium, Grand Rapids

Chairman: H. H. Hiscock, M.D., Kalamazoo
Secretary: L. L. Loder, M.D., Muskegon

P.M.
2:00 **"Management of Rheumatic Fever and Rheumatic Heart Disease"**
Leo M. Taran, M.D., Roslyn, Long Island, New York
Medical Director, St. Francis Sanatorium; Consultant Cardiologist, Meadowbrook Hospital; Chief, Children's Cardiac Clinic, King's County Hospital

In recent years it has become clear that the diagnostic criteria of rheumatic fever which have been evolved over the years fall short in adequately describing the disease as we see it at present. This may be explained on the basis of a distinct change in the natural course of this disease or in a wider experience with more sensitive diagnostic means. Experience with large numbers of cases observed under controlled conditions give the unequivocal impression that the fundamental nature

of rheumatic fever is rheumatic carditis; that all other classical manifestations may be superficial and express simply the reaction of the individual patient to the disease.

These observations further teach the clear cut lesson that rheumatic fever and rheumatic heart disease begin much earlier than has been suspected and that the activity lasts much longer than the clinical symptoms would seem to indicate.

Careful evaluation of various therapeutic regimes lead to the conclusion that for the moment there are no specific pharmacological means for altering the course of this disease. In our experience the best approach is meeting basic physiologic demands placed upon the patient by his disease and thus bringing him to a more adequate physiologic economy of adaptation to the disease. Long term sanatorium care with all its implications remains the most constructive way of managing this disease. Salicylates, hormones, and other similar suggestions have a definite place in the pharmacology of rheumatic fever and rheumatic heart disease, but only as a means of "tying over the patient" during the course of the acute explosive stage. Cardiac rest remains the treatment of choice for protracted carditis.

Antihemolytic streptococcal drugs may serve to prevent acute episodes in some rheumatic patients. A large experience with this measure for the prevention of rheumatic onsets or recurrences is being accumulated. The results of this experience will become apparent in the next few years.

2:30 **"Multiple Sclerosis"**

WILLIAM L. BENEDICT, M.D., Rochester, Minnesota

Emeritus Professor of Ophthalmology, University of Minnesota; President, American Ophthalmological Society; Secretary-Treasurer, American Academy of Ophthalmology and Otolaryngology

The ocular symptoms of multiple sclerosis are similar to other affections of the optic nerve trunk and consist of visual loss to a degree proportionate to the severity of the lesion, the rapidity of onset and the length of time it is effective. Differential diagnosis is supported by other local and constitutional findings and the results of biological tests and roentgenograms. In the absence of additional evidence of multiple sclerosis, the visual symptoms are only presumptive of that disease of the nerves as the cause of blindness, and a definite diagnosis may be deferred pending occurrences of other data. However, the history of an episode of blindness brought on by attacks of multiple sclerosis is characteristic and sometimes pathognomonic.

Symptoms similar to those of multiple sclerosis are brought on by retrobulbar neuritis of toxic origin, chronic intracranial inflammations, tumors situated on or near the anterior visual pathways and trauma. The etiology of multiple sclerosis is obscure. The initial changes in the nerve and the stages of pathologic progression are well known, but methods of treatment are controversial. The disease attacks young females predominantly, and about 15 per cent of all cases have ocular symptoms.

3:00 **INTERMISSION TO VIEW EXHIBITS**

4:00 **"The Post Cesarean Baby"**

DAVID P. FINDLEY, M.D., Omaha, Nebraska

Assistant Professor of Obstetrics and Gynecology, College of Medicine, University of Nebraska

4:30 **"Treatment of Psychosomatic Illness"**

O. SPURGEON ENGLISH, M.D., Philadelphia, Pennsylvania

Professor and Head of Department of Psychiatry, Temple University Medical School and Hospital

5:00 **END OF SECOND ASSEMBLY**

Program of Sections

WEDNESDAY
September 23, 1953

5:00 to 6:00 p.m.

SECTION ON OPHTHALMOLOGY

Parlor G, Civic Auditorium

Chairman: L. L. LODER, M.D., Muskegon
Secretary: L. F. CARTER, M.D., Detroit

"Orbital Edema"

WILLIAM L. BENEDICT, M.D., Rochester, Minnesota

A number of systemic diseases and some local diseases are accompanied by edema of the orbit. In some instances the edema is present in only moderate amount for a few days or a few weeks. In others it is recurrent, variable, or progressively worse, sometimes resulting in permanent tissue changes.

Coincident edema of the eyelids is quite common and in some cases precedes edema of the orbit or is predominant.

Etiology is not known in some forms of orbital edema; some are metabolic in origin, others due to local or obscure causes.

Diagnosis is not difficult in most cases, but some conditions characterized by orbital edema are not generally recognized in the early stages.

Treatment is directed toward the cause when known. Symptomatic treatment by irradiation, surgery and medicinal agents is recommended for relief from pain and visual impairment.

SECTION ON NERVOUS AND MENTAL DISEASES

Parlors B and C, Civic Auditorium

Chairman: T. V. HOAGLAND, M.D., Detroit
Secretary: K. C. NICKEL, M.D., Grand Rapids

"The Obligations and the Opportunities of the Neuro-Psychiatrist in Public Education"

O. SPURGEON ENGLISH, M.D., Philadelphia

SECTION ON PEDIATRICS

Red Room, Civic Auditorium

Chairman: P. S. BRADSHAW, M.D., Muskegon
Secretary: H. B. ROTHBART, M.D., Detroit

"Nature and Diagnosis of Rheumatic Fever and Rheumatic Heart Disease"

LEO M. TARAN, M.D., Roslyn, N. Y.

SECTION ON SURGERY

Black and Silver Ballroom, Civic Auditorium

Chairman: J. M. WELLMAN, M.D., Lansing
Secretary: C. L. MACCALLUM, M.D., Midland

"Newer Aspects of Parenteral Alimentation in the Postoperative Period"

WILLIAM D. HOLDEN, M.D., Cleveland, Ohio

One of the many unsolved problems in clinical surgery is the maintenance of a satisfactory nutritional state in a surgical patient who has undergone an extensive operative procedure and cannot be fed orally for a prolonged period of time during the postoperative period. This problem is even more difficult in patients who, for any number of reasons, have had an inadequate nutritional intake prior to the operation.

In the past salt and dextrose solutions were given parenterally but the patient could not be provided with adequate amounts of minerals, utilizable nitrogen, and calories. With newer developments and increased knowledge in the field of parenteral alimentation, it is now possible to give amino acids, various electrolytes, vitamins, fructose, and adequate calories in the form of fat emulsions.

A discussion of the effect of some of these factors on the total metabolism of surgical patients will be presented with attention given to the present state of parenteral nutrition.

SECTION ON UROLOGY

Rooms D and E, Civic Auditorium

Chairman: F. B. BICKNELL, M.D., Detroit
Secretary: B. W. DOVITZ, M.D., Detroit

"Renal Injury From Aortography"

FRANK HINMAN, JR., M.D., San Francisco

Seven patients have been studied who showed renal injury after aortography—either by direct trauma to the

kidney by excessive pressure or misdirected needle, or by indirect injury from drug irritation or sensitivity. Certain rules can be applied clinically to avoid these complications.

WEDNESDAY EVENING
September 23, 1953

GENERAL (PUBLIC) MEETING

Black and Silver Ballroom, Civic Auditorium, Grand Rapids

President: R. J. Hubbell, M.D., Kalamazoo
Secretary: L. Fernald Foster, M.D., Bay City

P.M.

8:30 OFFICERS' NIGHT—PUBLIC MEETING

1. Call to order, announcements and reports of the House of Delegates by L. Fernald Foster, M.D.
2. Introduction of President R. J. Hubbell, M.D., followed by President's Annual Address.
3. Induction of members into the MSMS "Fifty-Year Club" by President R. J. Hubbell, M.D.
4. Address by E. J. McCormick, M.D., Toledo, Ohio, President of American Medical Association.
   "Organized Medicine — Its Progress and Problems."
5. Presentation of scrolls.
6. Introduction of President-Elect L. W. Hull, M.D., Detroit, and induction of Dr. Hull into office of President of the Michigan State Medical Society by the Retiring President.
   Response of Dr. Hull.
7. Introduction of the new President Elect and other newly elected Officers and of the Chairman of The Council, William Bromme, M.D., Detroit.
8. Presentation of scroll and Past President's Key to Retiring President Dr. Hubbell by the Chairman of The Council, Dr. Bromme.

9:15 9. The Andrew P. Biddle Lecture.
"World Affairs and Foreign Policy"
United States Senator Homer Ferguson, Detroit (30 minutes)



Andrew P. Biddle, M.D.
(Deceased August 2, 1944)

Patron of Postgraduate Medical Education

10. Presentation of Biddle Lecture Scroll.
10:00 11. Adjournment.

THURSDAY MORNING
September 24, 1953

Third Assembly

Black and Silver Ballroom, Civic Auditorium, Grand Rapids

Chairman: J. E. Livesay, M.D., Flint
Secretary: C. J. Williams, M.D., Grosse Pointe

GENERAL PRACTICE DAY

A.M.

9:00 "What Can Bronchoscopy Do for the General Practitioner?"

Chevalier L. Jackson, M.D., Philadelphia, Pennsylvania

9:30 "The Crushed Hand"
Michael L. Mason, M.D., Chicago, Illinois
Professor of Surgery, Northwestern University Medical School

Crushing injuries of the hand present complicated problems both in immediate care and later reparation. To the actual loss of tissue caused by the injury is added extensive devitalizing damage to skin, and other structures which necessitates wide excision. Injuries of this type caused by punch presses, gears, rollers, belts and pulleys, mangles, corn-pickers and other machinery present difficult problems to the surgeon who first sees them and upon whose initial care the ultimate function of the hand depends. A basic plan for evaluating and treating such wounds is of great help and differs only in details from the plan for care of all open wounds. Adequate wound cleansing and excision, closure of the wound with skin by any one or any combination of methods, molding of the hand into the position of function and splinting in this position under a properly applied compression dressing are the essentials of care.

10:00 INTERMISSION TO VIEW EXHIBITS

11:00 "Management of Hearing Impairments"
George E. Shambaugh, Jr., M.D., Chicago, Illinois
Professor of Otolaryngology, Chairman of Department, Northwestern University Medical School

The management of a patient with a hearing impairment begins with the diagnosis of the type of hearing loss and its probable etiology. Correction of the hearing defect where possible by medical or surgical treatment is the next step. Audiologic rehabilitation is the third step in the management of hearing impairments that cannot be improved to the level of useful practical hearing by therapy.

The methods used in diagnosis of hearing losses will be briefly reviewed. The possibilities of medical and surgical restoration of hearing will be illustrated by specific case reports. The methods available for audiologic rehabilitation of incurable hearing losses will be described.

In childhood the majority of mild hearing losses are due to obstruction of the eustachian tubes and are remediable. On the other hand, most children with a severe hearing loss generally have a non-remediable type of nerve involvement.

In middle life the most common cause for progressive hearing impairment is otosclerosis, a condition which is remediable in most cases by the fenestration operation. The indications for and limitations of this procedure will be described.

Beyond the age of sixty, a nerve type of loss, termed presbyacusis causes a gradually progressive loss of hearing that cannot be improved by therapy.

11:30 "Patients Are People—A Physician Soliloquy"
Blair Holcomb, M.D., Portland, Oregon
Clinical Professor of Medicine, University of Oregon Medical School

As one contemplates the practice of medicine today from the vantage point of thirty odd years of experience, certain impressions stand out in one's mind. And, in a contemplative mood, perhaps it is only natural to take a philosophical rather than a technical viewpoint. Indeed, it may be, that in the fantastic speed of advance of medical knowledge, a sense approaching bewilderment comes to the older physician. It may be that a feeling of inadequacy to keep abreast of technical advances in medicine, influences his thinking. He, perforce, develops

a detached, philosophical approach to the practice of medicine. Unquestionably, this approach is engendered by his experience with people rather than with things. As I say these words to you, I am sure you realize that I am reflecting my own experience and thinking as a physician. More and more throughout the past fifteen years I have spent a greater proportion of my working hours with the patient as a person than I have devoted to the consideration of his disease. This relative preoccupation with the individual, I am sure, has not detracted from his technical care. Rather, I am just as certain, it has enhanced it.

With these frank confessions as a background, perhaps I may be pardoned if I express dogmatically some of my observations and convictions about medicine as we practice it today.

12:00 END OF THIRD ASSEMBLY

THURSDAY NOON

(No Luncheons)

September 24, 1953

12:00 to 1:00 p.m.

DISCUSSION CONFERENCE

Black and Silver Ballroom, Civic Auditorium

Leader: ARCH WALLS, M.D., Detroit
Participants: J. A. BARGEN, M.D., Rochester, Minnesota; ALLAN C. BARNES, M.D., Cleveland; ARTHUR T. HERTIG, M.D., Boston; BLAIR HOLCOMB, M.D., Portland, Ore.; CHEVALIER L. JACKSON, M.D., Philadelphia; LOUIS A. M. KRAUSE, M.D., Baltimore; MICHAEL L. MASON, M.D., Chicago; VICTOR A. NAJJAR, M.D., Baltimore; HARRISON SADLER, M.D., Grosse Pte. Farms, Michigan; and GEORGE E. SHAMBAUGH, JR., M.D., Chicago.

THURSDAY AFTERNOON

September 24, 1953

Fourth Assembly

Black and Silver Ballroom, Civic Auditorium, Grand Rapids

Chairman: F. H. DRUMMOND, M.D., Kawkawlin
Secretary: J. P. OTTAWAY, M.D., Detroit

P.M.

2:00 **"Management of the Infertile Couple"**
ALLAN C. BARNES, M.D., Cleveland, Ohio

2:30 **"Genesis of Uterine Cancer, Cervical and Endometrial"**

ARTHUR T. HERTIG, M.D., Boston, Massachusetts

Shattuck Professor of Pathological Anatomy, Head of Department of Pathology, Harvard Medical School.

Carcinoma *in situ* of the cervix uteri is apparently the precursor of invasive cervical carcinoma as suggested by: (1) its incidence, (2) its earlier appearance, (3) its comparably lower incidence in Jewish women, (4) cases which have progressed from carcinoma *in situ* to invasive carcinoma, (5) increasing correlation with the vaginal smear as the lesion progresses to cancer, (6) morphologic *in situ* pattern at margin of invasive cancer, (7) similar light absorption data from sections of *in situ* and invasive carcinoma.

Reference: Hertig, A. T., and Younge, P. A.: Am. J. Obst. & Gynec., 64:807, 1952.

Of 500 cases of endometrial carcinoma, thirty-two cases had tissue taken one to twenty-three years prior to diagnosis. Only such endometrium taken one to fifteen years before was, however, abnormal. Such abnormalities included endometrial polypi, cystic hyperplasia, adenomatous hyperplasia, anaplasia and finally carcinoma *in situ*. In general, the later stages of these progressive changes became more frequent as the time interval shortened between prior biopsy and the diagnosis of cancer. The thirty-two cases, when they developed carcinoma, had an age range, histological appearance and mortality comparable to the entire group of 500 cases of endometrial carcinoma.

Reference: Hertig, A. T., and Sommers, S. C.: Cancer, 2:946-956, 1949.

3:00 INTERMISSION TO VIEW EXHIBITS

4:00 **"The Problems of Jaundice in Infancy and Childhood"**

VICTOR A. NAJJAR, M.D., Baltimore, Maryland
Associate Professor of Pediatrics, Johns Hopkins Hospital

1. The causes of jaundice in infancy and childhood will be discussed including a new entity recently described in the newborn "Congenital Familial Nonhemolytic Jaundice with Kernikterus."
2. The anatomical and physiological causes will be correlated with reference to the types of bilirubin found in the serum.
3. The symptomatology of the various types of jaundice will be reviewed.
4. The physiological aspects of bilirubin excretion and clearance through the liver will be shown.

4:30 **"Physical Examination"**
LOUIS A. M. KRAUSE, M.D., Baltimore, Maryland
Professor of Clinical Medicine, University of Maryland Medical School; Chief of Medicine, Lutheran Hospital and City Hospitals, Baltimore

5:00 END OF FOURTH ASSEMBLY

Program of Sections

THURSDAY

September 24, 1953

5:00 to 6:00 p.m.

SECTION ON OTOLARYNGOLOGY
Room G, Civic Auditorium

Chairman: F. A. LAMBERSON, M.D., Detroit
Secretary: R. B. FAST, M.D., Kalamazoo

"Mechanics of Hearing as Related to Therapy"
GEORGE E. SHAMBAUGH, M.D., Chicago

Roughly, half of the patients that consult us because of a hearing impairment have a conductive type of loss, and half have a pure perceptive loss. As a general rule, most conductive losses can be helped by therapy, whereas perceptive losses cannot be improved by any form of medical or surgical treatment. The only exception to this are the rare cases of psychogenic deafness and the more common condition of labyrinthine hydrops, which in its early stages may respond to medical treatment.

An appreciation of the mechanics of the sound conducting impedence-matching apparatus of the middle ear, permits the application of techniques for the improvement of hearing in various types of conductive losses.

Congenital anomalies of the sound conducting system may be corrected with a very good improvement in hearing by constructing a new impedence-matching mechanism. Depending upon the deformity that is found, a full thickness skin graft is placed in contact with the stapes as a substitute tympanic membrane, or if the stapes is found to be ankylosed, a fenestra is made in the horizontal sub-circular canal. Perforations of the tympanic membrane may be closed with the restoration of normal hearing.

Occlusion of the eustachian tube with secretory otitis nearly always responds with appropriate therapy. Many of these cases are associated with a chronic nasal allergy and clear up only after allergic management.

Adhesive otitis, the result of a previous microtic otitis media, can be helped by construction of a new tympanic cavity and substitute tympanic membrane with fenestration of the labyrinth when the stapes is found to be fixed.

Stapes fixation due to otosclerosis can be helped by fenestration. An appreciation of the mechanics of the fenestrated ear permits us to predict the improvement to be expected from operation in a particular case. The mechanics of the fenestrated ear may be improved further by the use of anaquaphor prosthesis which frequently gives a 5 to 10 decibel added improvement in hearing for the speech frequencies, resulting in a very gratifying final level of hearing.

SECTION ON GENERAL PRACTICE

Black and Silver Ballroom, Civic Auditorium

Chairman: C. J. Williams, M.D., Grosse Pointe
Secretary: J. W. Rice, M.D., Jackson

"The Necessity of Illness"

Harrison Sadler, M.D., Grosse Pointe Farms

Associate Professor of Psychiatry, Wayne University College of Medicine

SECTION ON OBSTETRICS AND GYNECOLOGY

Red Room, Civic Auditorium

Chairman: J. P. Ottaway, M.D., Detroit
Secretary: J. L. Gillard, M.D., Muskegon

"Cancer of the Cervix"

Allan C. Barnes, M. D., Cleveland

SECTION ON GASTROENTEROLOGY AND PROCTOLOGY

Rooms B and C, Civic Auditorium

Chairman: R. L. Fitts, M.D., Grand Rapids
Secretary: R. M. Burke, M.D., Detroit

"The Management of Iliocolitis"

J. A. Bargen, M.D., Rochester, Minnesota

The differential diagnosis of some of the common forms of ulcerative colitis and ileitis will be discussed, including regional ileitis, amebiasis, segmental and diffuse ulcerative colitis. The important diagnostic laboratory data will be stressed. A suitable program of treatment will be outlined for each of these conditions.

THURSDAY EVENING

September 24, 1953

STATE SOCIETY NIGHT

Ballroom, Pantlind Hotel

P.M.
10:30 **An evening of entertainment for all registrants, their ladies and guests.**

Cabaret-style Dance and Floor Show
Host: Michigan State Medical Society
(Admission by card furnished to all upon registration)

ONLY ONE MORE DAY TO VISIT YOUR MANY FRIENDS IN THE EXHIBIT

FRIDAY MORNING

September 25, 1953

Fifth Assembly

Black and Silver Ballroom, Civic Auditorium, Grand Rapids

Chairman: J. D. Miller, M.D., Grand Rapids
Secretary: F. A. Lamberson, M.D., Detroit

A.M.
9:00 **Beaumont Lecture**
"Problems of Nutrition in Ulcerative Disease of the Digestive Tract"

J. A. Bargen, M.D., Rochester, Minnesota

Professor of Medicine, Mayo Foundation; Chief of Department of Gastroenterology, Mayo Clinic

The fundamental concepts of the origin and inception of ulcerative disease of the stomach and intestine will be outlined. The effect of long-standing ulcerative disease on the human bodily economy will be detailed. The development of various nutritional disturbances and the problems of combating these will be described. More detailed discussion of the various disorders of nutrition and metabolism associated with ulcerative disease of the digestive tract will be stressed, together with suggestions for their correction.

9:30 **"Oral and Cutaneous Clues in Medicine and Surgery"**

John G. Downing, M.D., Boston, Massachusetts

Professor Emeritus, Dermatology at Tufts College Medical School and Boston University.

Look and learn! Many diseases may be misdiagnosed, not because the physician does not know, but because he does not look at the patient thoroughly. This is true not only in the field of internal medicine, but also in surgery and the various specialties such as eye and ear, nose and throat. Even the pathologist can be helped in his final diagnosis by observing the clinical lesion. Careful observation of the patient, his mucous membranes and skin will often supply valuable clues for diagnosis. Frequently the first sign of a systemic disease may be seen by the dentist on the oral mucous membrane. Many systemic diseases start with a mild eruption on the skin. In these days of multiple drug therapy it is very important that the physician be able to differentiate between eruptions caused by drugs and those due to systemic diseases. The surgeon should have a knowledge of the cutaneous lesions which are physical signs of important abdominal disturbances. The obstetrician should be cognizant of the various cutaneous eruptions that complicate pregnancy. The internist should recognize the various pigment changes that occur on the skin from nutritional and metabolic disturbances. The hematologist should know the various cutaneous lesions which often accompany blood dyscrasias. The cardiologist should not discard the suggestive skin lesions which may appear before corroboration can be made by the stethoscope or electrocardiogram. Finally, the dermatologist should be cognizant of the various cutaneous symptoms and signs which should prompt him to co-operate with other clinicians working in the various fields of medicine.

10:00 **INTERMISSION TO VIEW EXHIBITS**

11:00 **"Hepatography—The Roentgen Examination Of the Liver"**

Leo G. Rigler, M.D., Minneapolis, Minnesota

Professor and Chief of Department of Radiology, University of Minnesota Medical School, Minneapolis

11:30 **"An Evaluation of the Grand Rapids Water Fluoridation Supply"**

John W. Knutson, D.D.S., Washington, D. C.

Assistant Surgeon General, Chief Dental Officer, Public Health Service

12:00 **END OF FIFTH ASSEMBLY**

FRIDAY NOON

(No Luncheons)

September 25, 1953

12:00 to 1:00 p.m.

DISCUSSION CONFERENCE

Black and Silver Ballroom, Civic Auditorium

Leader: A. A. Humphrey, M.D., Battle Creek

Participants: J. A. Bargen, M.D., Rochester, Minnesota; John G. Downing, M.D., Boston; Leslie N. Gay, M.D., Baltimore, Maryland; Julian Johnson, M.D., Philadelphia; Paul R. Cannon, M.D., Chicago; Norman M. Keith, M.D., Rochester, Minn.; John W. Knutson, D.D.S., Washington, D. C.; Harold J. Magnuson, M.D., Chapel Hill, North Carolina; Leo G. Rigler, M.D., Minneapolis, Minnesota.

FRIDAY AFTERNOON

September 25, 1953

Sixth Assembly

Black and Silver Ballroom, Civic Auditorium, Grand Rapids

Chairman: R. J. Hubbell, M.D., Kalamazoo

Secretary: M. G. Butler, M.D., Saginaw

P.M.

2:00 **"Successes and Failures in Relation to the Problem of Parenteral Alimentation"**

Paul R. Cannon, M.D., Chicago, Illinois

Professor of Pathology, Chairman, Department of Pathology, University of Chicago

The important advances in the field of parenteral alimentation include the wider use of whole blood, plasma, serum albumin, protein hydrolysates, vitamin solutions, and a better understanding of the importance of proper electrolyte solutions, notably those containing potassium. As a result, the preoperative and postoperative care of patients has been materially improved.

Before a completely adequate parenteral alimentation is achieved, however, several obstacles must be overcome. For example, the big problem of caloric adequacy remains, despite the increasing use of glucose solutions as well as solutions containing fructose and alcohol. Fat emulsions suitable for intravenous use are now feasible, but difficulties in their keeping qualities make them unsuitable for general use. Balanced salt solutions have been developed for particular purposes but their use is still limited. The problem of homologous serum jaundice still remains to limit the usefulness of plasma. Above all, there is still too much complacency in relation to the fullest use of information and materials now available. Discussion will be directed at the over-all problem.

2:30 **"The Interpretation of Positive Serologic Tests For Syphilis in Clinically Negative Patients"**

Harold J. Magnuson, M.D., Chapel Hill, North Carolina

Director, Venereal Disease Experimental Laboratory, U.S.P.H.S.; Research Professor Experimental Medicine, University of North Carolina, Chapel Hill, North Carolina.

During recent years there has been increasing concern on the part of the physician in the interpretation of positive serologic tests for syphilis in the clinically negative patient. At least three factors have contributed to this concern. The widespread use of mass serologic testing procedures on presumably healthy individuals, either on a voluntary basis or as part of legal requirements, has increased the number of persons falling into the above category. Secondly, the recent declines in the incidence of syphilis in the United States have given rise to a relative increase in the proportion of biologic false positive reactors in any group of persons with positive serologic tests. Third, recent laboratory developments in the serodiagnosis of syphilis and the publicity attendant to their discovery have served to emphasize, perhaps unduly, the size of the biologic false positive reactor problem.

While the ultimate decision as to whether the patient has syphilis must rest on the careful synthesis of all clinical and laboratory findings, newer developments in the laboratory field can be of considerable assistance in this evaluation. The evaluation of these procedures, their clinical interpretation, and a consideration of their present status and probable future will be presented.

3:00 **FINAL INTERMISSION TO VIEW EXHIBITS**

3:30 **"Some Important Factors in the Treatment of Edema"**

Norman M. Keith, M.D., Rochester, Minnesota

Professor of Medicine, Emeritus, University of Minnesota; Consultant in Medicine, Emeritus, Mayo Clinic

During the last thirty (30) years the application of accurate microchemical and microphysical methods has added much useful knowledge to the problem of edema. Some of the facts disclosed have facilitated the physician's ability to treat successfully certain types of edema. On the contrary, other results of clinical research indicate the complexity of the conditions sometimes encountered. These latter have become more numerous, in part because of more frequent application of newer antiedemic therapy and as a result, prolongation of life.

Low salt diets occupy an important place in the treatment of edema. However, these may cause hyponatremia and hypochloremia and a liberal intake of sodium chloride may sometimes be necessary for the initiation of diuresis. The actual intake of water may also be important.

The diuretics chiefly employed are derivatives of organic mercury, acid salts, potassium salts and xanthine compounds. Certain substances that expand the plasma, for example, normal blood plasma, serum albumin, acacia or dextran may give rise to diuresis. In the use of these therapeutic agents, the physician must remember that they may not only remove excessive body fluids, but possibly other substances that are necessary for healthy metabolism. Thus tissue replacement may become a therapeutic problem.

This introduction of cortisone and corticotropin to the therapy of nephritic and nephrotic edema has added a new chapter to the study of edema. In some patients these hormones caused diuresis, while in others the changes in metabolism has been significant.

4:00 **"The Dramatic Story of Dramamine"**

Leslie N. Gay, M.D., Baltimore, Maryland

Professor of Medicine, Johns Hopkins University School of Medicine.

4:30 **"The Present Status of the Surgery of Mitral and Aortic Stenosis"**

Julian Johnson, M.D., Philadelphia, Pennsylvania

Professor of Surgery of the School of Medicine and Graduate School of Medicine, University of Pennsylvania

The experience gained with more than 100 consecutive operations for mitral stenosis will be reported. Emphasis will be placed upon the use of the angiocardiogram in the selection of patients. As far as we know, the angiocardiogram was first used for this purpose in our clinic. Its virtues will be discussed.

The preoperative preparation and the anesthetic management are extremely important and will be presented in some detail.

The experience in this series has been that while finger fracture alone is often satisfactory, it has been necessary to use a cutting instrument in almost half of the patients. In certain patients it has not been possible to open the commissure entirely out to the heart wall by the use of the finger along.

The result of the operation can be predicted reasonably accurately by the increase in the mitral opening obtained by the surgeon. The vast majority of the patients have been greatly improved. The mortality has been reduced from an early figure of about 20 per cent to the present one of 5 per cent. The complications and results of the procedure will be reported in detail.

A dilating instrument is now available to open the stenotic aortic valve. Ten patients have now been operated upon by us with one death. It appears to be a very promising method. The results of its use will be presented.

5:00 END OF SIXTH ASSEMBLY

—Program of Sections—

FRIDAY

September 25, 1953

5:00 to 6:00 p.m.

SECTION ON RADIOLOGY

Rooms B and C, Civic Auditorium

Chairman: F. K. Wietersen, M.D., Birmingham

"Vascular Disturbances of the Lungs"

Leo G. Rigler, M.D., Minneapolis, Minnesota

SECTION ON DERMATOLOGY AND SYPHILOLOGY

Red Room, Civic Auditorium

Chairman: M. G. Butler, M.D., Saginaw
Secretary: C. J. Courville, M.D., Detroit

"Hand Affections—A Diagnostic, Therapeutic, Economic, and Rehabilitation Problem"

John G. Downing, M.D., Boston, Massachusetts

It has often been remarked that a severe cutaneous eruption of the hands is more discomforting and disabling than a broken limb. This fact has in the past 20 years been thoroughly realized by insurers who find that hand affections have cost them many millions of dollars. It is recognized by labor also who realize it has cost numerous hours of loss of manpower. Mistakes in diagnosis have also been expensive, inasmuch as a physician is apt to fail to differentiate between diseases caused by external factors from those diseases of the hands caused by systemic disturbances. No satisfactory therapeutic regime has been outlined for such affections. Lastly, there is no rehabilitation plan to try to restore the patient afflicted by traumatic injuries of the hands to a useful position in his future economic existence. An attempt will be made to briefly summarize the various cutaneous affections involving the hands, and to outline some suggestions as to therapy and prevention of further disabilities. Illustrations will be shown of certain types of dermatitides including dermatitis factitia and systemic diseases difficult to differentiate from dermatitides due to external factors.

SECTION ON PUBLIC HEALTH AND PREVENTIVE MEDICINE

Rooms D and E, Civic Auditorium

Chairman: J. G. Molner, M.D., Detroit
Secretary: C. A. Neafie, M.D., Pontiac

"Fluorides and Dental Health"

John W. Knutson, D.D.S., Washington, D. C.

SECTION ON PATHOLOGY

Continental Room, Pantlind Hotel

Chairman: W. A. Stryker, M.D., Wyandotte

(See announcement of meeting of Michigan Pathological Society)

SECTION ON MEDICINE

Black and Silver Ballroom, Civic Auditorium

Chairman: D. R. Boyd, M.D., Muskegon
Secretary: C. K. Stroup, M.D., Flint

Title to be Announced

Leslie N. Gay, M.D., Baltimore, Maryland

6:00 END OF SCIENTIFIC ASSEMBLY AND OF THE 1953 ANNUAL SESSION

HOTEL RESERVATIONS

MICHIGAN STATE MEDICAL SOCIETY

88th Annual Session

Grand Rapids, September 21 to 25, 1953

The reservation blank below is for your convenience in making your hotel reservations in Grand Rapids. Please send your application to L. E. Ames, Secretary, Committee on Hotels for MSMS Convention, Pantlind Hotel, Grand Rapids, Michigan. Mailing your application now will be of material assistance in securing hotel accommodations.

As very few singles are available, registrants are requested to co-operate with the Committee on Hotels by sharing a room with another registrant, when convenient.

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L. E. Ames, Secretary,
Committee on Hotels, MSMS Convention,
c/o Pantlind Hotel
Grand Rapids, Michigan

Please make hotel reservation(s) as indicated below:

.....Single Room(s)

.....Double Room(s) for.....persons

.....Twin-Bedded Room(s) for.....persons

Arriving September.....hour.....A.M.....P.M.

Leaving September.....hour.....A.M.....P.M.

Hotel of First Choice:.....

Second Choice:.....

Names and addresses of all applicants including person making reservation:

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Date..... Signature.....

Address..... City.....

Scientific Exhibits

American Medical Association **Booth Nos. I, II, III**
Chicago, Illinois

"Your Medical Care"

This exhibit is composed of seven separate units using three-dimensional carved figures portraying suggested programs of the American Medical Association to make medical care more readily available to all persons.

American College of Surgeons Trauma Committee
Grand Rapids Chapter **Booth No. IV**

"Trauma to the Chest"

Cook County Hospital (Walter J. Reich, M.D.)
Chicago, Illinois **Booth No. V**

"Abnormal Bleeding in Gynecology"

Detroit Cancer Center **Booth No. VI**
Detroit, Michigan

"Activities of the Detroit Cancer Center"

Exhibit portrays the Detroit Cancer Center program of lay and professional education; fundamental, clinical, and statistical research; services to patients and physicians; cancer detection examinations; fund-raising to support these activities; carried on by the American Cancer Society Southeastern Michigan Division, Detroit Institute of Cancer Research, Yates Memorial Clinic and Michigan Tumor Registry.

MSMS Cancer Control Committee and **Booth No. VII**
Michigan Division, American Cancer Society

"Cancer of the Colon and Rectum"

Presents statistics, etiology, pathology, diagnosis, treatment and after-care of colostomies. Also rubber models with viewing instruments for observation of lesions. Kodachrome slides show early malignant lesions. Delay in diagnosis is emphasized.

MSMS Rheumatic Fever Control **Booth No. VIII**
Program and Michigan Heart Association

"The MSMS Rheumatic Fever Control Program"

Charts and graphs concerning the Diagnosis, Treatment and Prevention of rheumatic fever and rheumatic heart disease and the Rheumatic Fever Control Program of the Michigan State Medical Society. The exhibit will feature a demonstration of the Cardioscope; Stethographic recordings by Franklin D. Johnston, M.D., University of Michigan Medical School, and by J. Scott Butterworth, M.D., N. Y. U. Postgraduate Medical School will be presented.

Michigan Heart Association **Booth No. IX**

"The Mechanical Heart Acclaimed One of the Top Ten Scientific Developments of 1952."

Exhibit consists of three panels showing the actual mechanical heart in operation. It also depicts the methods of cannulation for double-sided substitution of the heart plus an "exploded" view of all parts which come in contact with the blood.

Wayne University College of Medicine **Booth No. X**
and Wayne County General Hospital

"Obstetrical Shock of Abruptio Placentae"

During abruptio placentae conditions are favorable for autoextraction of decidual juices and debris into the maternal circulation. These materials may initiate widespread intravascular coagulation. This may jeopardize the very existence of the individual not only by depletion of coagulation mechanisms but by occluding the pulmonary circulation, thereby causing "obstetrical shock."

Michigan Department of Health **Booth No. XI**
Lansing, Michigan

"Simple Goiter and Iodized Salt"

Michigan's dramatic conquest of endemic goiter within the past thirty years is shown by photographs and diagrams, from the initial survey of school children in 1923 revealing 47.2 per cent with thyroid enlargement, through the introduction of iodized salt in 1924, to the survey in 1951 with its amazing drop in goiter to 1.4 per cent.

Michigan Pathological Society **Booth No. XII**

Michigan Crippled Children Commission **Booth No. XIII**

Allergy Clinic, Harper Hospital **Booth No. XIV**
Detroit, Michigan

"Patterns in Contact Dermatitis"

Attention to the pattern of a dermatitis can often establish the causative diagnosis and produce a cure.

MSMS Public Relations **Booth No. XV**

"Medical Associates and the screening of medical motion pictures"

An example of the type of exhibits available to County Medical Societies for local exhibitions, state and county fairs. The purpose of the exhibit is to acquaint MSMS members with what they might receive in answer to requests to MSMS and AMA for exhibits to be placed by local medical societies before local gatherings.

American Academy of General Practice **Booth No. XVI**
Kansas City, Missouri

Michigan Tuberculosis Association **Booth No. XVII**
Lansing, Michigan

"The Practicing Physician and Tuberculosis Control"
Exhibit points up the extent of the problem in tuberculosis control, the part played by the practicing physician in case-finding, and the role of drugs in treatment as well as what can be expected from drugs.

Wayne University Alumni Association **Booth No. XVIII**
Detroit, Michigan

Detroit Society for the Prevention of **Booth No. XIX**
Blindness and Grand Rapids Association for the
Blind and for Sight Conservation

"Preventive Ophthalmology"

This exhibit described the role of many medical specialists in the prevention of blindness. Exhibit prepared by Isadore Givner, M.D., and Bernard Kronenberg, M.D., ophthalmologists of New York City.

Michigan Chapter **Booth No. XX**
Arthritis and Rheumatism Foundation

National Foundation for Infantile Paralysis
New York, New York **Booth No. XXI**

"Isolation Techniques and Nursing Care in Poliomyelitis"

The exhibit presents in graphic form reasons for isolation in poliomyelitis, method of setting up an isolation unit, isolation nursing techniques and nursing care of the respirator patient.

Technical Exhibits

Abbott Laboratories **Booth No. D-16**
North Chicago, Illinois

Abbott will display SULESTREX® Piperazine tablets for the control of symptoms of the climacteric. SULESTREX is a pure, odorless and tasteless compound which is rapidly hydrolyzed in the body. It provides rapid control of menopausal symptoms with an extremely low incidence of side-effects. SULESTREX is absolutely pure, crystalline estrogen, chemically standardized for unvarying hormonal activity. Because SULESTREX is absolutely pure, it can never impart an odor to the breath or perspiration. The pure inorganic salts of estrone sulfate are combined with piperazine to form a stable, water-soluble, crystalline salt. It is as effective estrogen therapy as it is presently possible to prescribe.

Alkalol Company **Booth No. C-13**
Taunton, Massachusetts

The Alkalol Company, Taunton, Massachusetts, will feature Alkalol, the balanced, alkaline, saline solution for the treatment of mucous membranes and irritated tissues. It is bland, non-toxic, and effective, and has been a favorite since 1896. We are also showing Irrigol, a powder which in solution makes an aseptic, slightly astringent vaginal douche. It is widely used also for colonic irrigations and as an effective rectal enema.

A. S. Aloe Company **Booth No. D-10**
St. Louis, Missouri

Visit Booth D-10 where the Aloe representative will show you a cross section of the complete line of physicians' equipment and supplies carried by the A. S. Aloe Company. Highlighted will be New Model Steeline—tomorrow's treatment room furniture today—featuring the body contour table top, magnectic door catches, and advanced design all in new decorators' colors.

American Hospital Supply Corporation **Booth No. C-19**
Evanston, Illinois

American Hospital Supply Corporation will have on display the complete line of Baxter intravenous solutions and accessory sets, including the new electrolyte solutions. Also on display will be Gentran, an effective, proven plasma volume expander for use in the treatment of shock.

Ames Company, Inc. **Booth No. B-15**
Elkhart, Indiana

APAMIDE—prescription analgesic—antipyretic (N-acetyl-p-aminophenol) of rapid and prolonged action, inherently well-tolerated.

APROMAL — non-narcotic, non-barbiturate sedative (acetylcarbromal) plus N-acetyl-p-aminophenol. Because it has virtually no hypnotic effect APROMAL may be prescribed for daytime use.

DECHOLIN with Belladonna will be shown as potent aid in treatment of several frequently occurring types of biliary dysfunction.

Armour Laboratories **Booth No. A-13**
Chicago, Illinois

Ayerst, McKenna & Harrison, Ltd. **Booth No. D-15**
New York, New York

You are cordially invited to visit Booth No. D-15 to see our exhibit which features "Thiosulfil," "Trilene" and "Deravine." Our representatives welcome this opportunity to answer any inquiries you may have relative to any of the products in our line of prescription specialties. Descriptive literature, reprints, and samples are available to physicians.

Baby Development Clinic **Booth No. F-3**
Chicago, Illinois

To aid Maternity Patients demonstration samples and literature concerning carefully selected supportive brassieres and sashes. Demonstration material on feeding including Evenflo bottles, nipples and brushless cleanser. Manual: simple, direct, cheerful, authoritative, helps parents prepare for coming baby. Film strips, slides and outlines for parents' classes.

Baker Laboratories, Inc. **Booth No. C-18**
Cleveland, Ohio

You are cordially invited to visit the Baker display where you will see beautiful translite pictures of Wisconsin Grade A Farms and the Baker's milk processing laboratories.

Medical service representatives will be glad to discuss with you the clinical application of Baker's Modified Milk and Varamel, two outstanding products that are making new progress in successful infant feeding.

Bard-Parker Company, Inc. **Booth No. C-17**
Danbury, Connecticut

"In a matter of seconds" . . . Rib-Back surgical blades ready for sterilization! The new B-P RACK-PACK saves time and labor in the O.R. . . . protects against costly accidental damage to sharp edges. Also knife handles, B-P Germicide, Chlorophenyl, sterilizing containers, transfer forceps and The Reese Dermatome.

Barry Laboratories, Inc. **Booth No. C-7**
Detroit, Michigan

The BARRY LABORATORIES exhibit will display the newest and most up-to-date allergy materials for diagnosis and treatment. Also on display will be their newly released germicidal concentrate, Merphene, for the cold sterilization of surgical instruments, as well as a complete line of injectables. An attendant will be available to answer questions.

Becton, Dickinson and Company **Booth No. E-18**
Rutherford, New Jersey

Becton, Dickinson and Company invites you to see the new Multifit Syringe—every plunger fits every barrel. Also on display, Yale Syringe and Needle Cleaner, Diagnostic Equipment, Ace and Asepto Bandages, Blood Collection Equipment, Thermometers and allied products.

Beech-Nut Packing Company **Booth No. A-10**
New York, New York

The Beech-Nut cereals will be displayed in the new 4-ounce size package. This innovation is a convenience to doctors and mothers both. Nutritionists will be in attendance at the booth to answer questions about the newer products as well as the complete line of Beech-Nut Strained and Junior Foods.

The Borden Company **Booth No. F-11**
New York, New York

The very latest in infant nutrition is available to you at the Borden booth No. F-11. Ask about BREMIL, MULL-SOY, DRYCO, and BIOLAC.

Brooks Appliance Company **Booth No. D-17**
Chicago, Illinois

The Brooks Appliance Company will exhibit and describe in detail the technique of applying the combination pressure bandages. The moist medicated Primer plus the Elastic Adhesive Dalzoflex which are used in treating leg ulcers and phlebitis. The Nulast Elastic Crepe Bandages, Elastic Stockings and Surgical Instruments will also be displayed.

Brown & Williamson Tobacco Corporation **Booth No. E-15**
Louisville, Kentucky

VICEROY

The exclusive Health-Guard Filter Tip on VICEROY King Size Cigarettes provides important protection to smokers. A demonstration and explanation of its unique advantages will be of interest to all.

Burroughs Wellcome & Company (U.S.A.) Inc. **Booth**
Tuckahoe, New York **No. D-2**

AEROSPORIN®* OTIC SOLUTION. Sterile. Antimicrobial, especially against Pseudomonas aeruginosa. Hygroscopic-acid · pH. *Aerosporin® Sulfate Polymyxin B Sulfate.
POLYSPORIN® Polymyxin B-Bacitracin ointment. Broad spectrum antibacterial action. Rarely sensitizes—Resistance rarely develops.

Camel Cigarettes **Booth Nos. A-15, A-16**
New York, New York

CAMEL Cigarettes will mark your initials on an attractive plastic cigarette case filled with a package of those mild, flavorful CAMELS. This exhibit features a display of some of the tobaccos used in blending this famous cigarette which outsells all other brands by many billions of cigarettes per year.

S. H. Camp & Company **Booth No. D-1**
Jackson, Michigan

S. H. Camp and Company cordially invites you to see the new Camp Plastica Orthopraxis Appliances, Cervical, Taylor and Goldthwait type braces. Inspect the latest development in supports for Pneumoperitoneum Treatment of Pulmonary Tuberculosis as well as Diaphragmatic Supports for Symptomatic Treatment of Pulmonary Emphysema. The Camp-Varco Pelvic Traction Belt is growing in acceptance and has been found increasingly useful in cases of low back syndrome. Let our representative show this to you along with the new rib fracture belts of laminated foam rubber and cloth.

Carnation Company **Booth No. B-14**
Los Angeles, California

The Carnation Company cordially invites you to visit Booth B-14 where you will see a series of translites on our canning and sterilization process. Carnation Medical Specialists will explain our sole processing and give you reasons why Carnation Milk deserves consideration as your first choice in infant feeding formulas.

Chicago Pharmacal Company **Booth No. E-10**
Chicago, Illinois

The Chicago Pharmacal Company (Chimedic) welcomes your visit to our booth, which features the following specialties: URISED, nationally known antiseptic and sedative tablet for all types of genito-urinary infections; TOLYPHY, the new improved muscle relaxant in both tablet and liquid form, which combines the full therapeutic dosage of mephenesin with physostigmine and atropine; plus a complete injectable line, featuring Council-accepted a-Estradiol and BEXII-M (1000 mcgm. B 12 Crystalline, U.S.P. per cc.).

Ciba Pharmaceutical Products, Inc. **Booth No. C-10**
Summit, New Jersey

Ciba's exhibit (Booth C-10) features two new agents for more effective management of hypertensive disorders—REGITINE, for simple and accurate diagnosis of hypertension produced by pheochromocytoma —APRESOLINE, an agent of choice for gradual sustained lowering of blood pressure.
You are invited to visit the Ciba booth for literature on APRESOLINE and REGITINE.

Coca-Cola Company **Booth Nos. A-18, A-19**
Atlanta, Georgia

Ice cold Coca-Cola served through the courtesy and cooperation of the LaSalle Coca-Cola Bottling Co. and The Coca-Cola Company.

DePuy Manufacturing Company **Booth No. A-23**
Warsaw, Indiana

De Puy Manufacturing Company, Inc., will feature the new mechanical bed jack that is trouble free, new improved Plymale Lift Frame, and many other new fracture and orthopedic appliances.

Desitin Chemical Company **Booth No. C-15**
Providence, Rhode Island

DESITIN OINTMENT: the pioneer in external cod liver oil therapy.
Indications: diaper rash, slow healing wounds, burns of all degrees, lacerations, hemorrhoids and fissures.
DESITIN POWDER: a unique, dainty medicinal powder saturated with cod liver oil.
DESITIN HEMORRHOIDAL SUPPOSITORIES with COD LIVER OIL: coats ano-rectal area with soothing, lubricating cod liver oil, gives prompt relief of pain, allays itching.
DESITIN LOTION: the original cod liver oil lotion, soothing, protective, mildly astringent and healing, in non-specific dermatitis, pruritus, poison ivy, et cetera.

Dictaphone Corporation **Booth No. B-11**
Detroit, Michigan

A way to gain extra time is on demonstration at the Dictaphone Booth. It's the new electronic Dicta-

phone Time-Master dictating machine used the world over by physicians to dictate case histories and correspondence, record interviews, consultations and telephone conversations. Completely portable, the Time-Master now saves valuable hours every week for thousands of doctors and their nurse assistants.

Dietene Company **Booth No. B-7**
Minneapolis, Minnesota



Visit our exhibit and examine the Free Diet Service for physicians. The diets are nutritionally well-balanced, easy to follow and made to appear as if they were typed in your office.
MERITENE, the economical and palatable whole protein supplement and DIETENE, the "Council-Accepted" reducing supplement will be on display.

Doho Chemical Corporation **Booth No. B-3**
New York, New York

Doho Chemical Corporation is pleased to exhibit AURALGAN, the ear medication for the relief of pain in Otitis Media and removal of Cerumen; RHINALGAN, the nasal decongestant which is free from systemic or circulatory effect and equally safe to use on infants as well as the aged; and the NEW OTOSMOSAN, the effective, non-toxic ear medication which is Fungicidal and Bactericidal (gram negative-gram positive) in the suppurative and aural dermatomycotic ears. Mallon Chemical Corporation, subsidiary of the Doho Chemical Corporation, is also featuring RECTALGAN, the liquid topical anesthesia, also Bactericidal and Fungicidal for control of secondary invaders, particularly recommended for treatment of mold infections (monilia) occurring after anti-biotic therapy; also for relief of pain and discomforture in hemorrhoids, pruritus and perineal suturing.

Eaton Laboratories, Inc. **Booth No. A-11**
Norwich, New York

For the treatment of urinary tract infections, Eaton Laboratories presents its new chemotherapeutic agent, Furadantin.® This unique nitrofuran is tailored specifically for the treatment of pyelonephritis, pyelitis and cystitis. It is intended for oral administration in those infections that have failed to respond to other medications, especially when caused by Proteus species.

Eisele & Company **Booth No. F-4**
Nashville, Tennessee

Eisele & Company will display their precision line of hypodermic syringes, hypodermic needles and clinical thermometers. This line will be offered for sale direct to the doctors at this Convention. There will be no middle men.

Electro-Medical Equipment **Booth No. F-7**
Detroit, Michigan

Gerald F. McNamara, distributor, is exhibiting the "Medcolator," a muscle stimulating machine with many applications in the physical medicine field. The unit is manufactured by the Medco Products Company of Tulsa, Oklahoma.

Encyclopedia Americana **Booth No. D-8**
Chicago, Illinois

All members of the Michigan State Medical Society are cordially invited to Booth D-8 where we will have on display, the 1953 edition of the ENCYCLOPEDIA AMERICANA and the Fortieth Anniversary Edition of the BOOK OF KNOWLEDGE.

Farnsworth Laboratories, Inc. **Booth No. F-15**
Chicago, Illinois

Fellows Medical Mfg. Company, Inc. **Booth No. E-12**
New York, New York

FELO'RAL CAPSULES—The first non-barbiturate antispasmodic sedative in soft gelatin capsules—will be featured. FELO'RAL CAPSULES (pink and white) contain Chloral Hydrate plus a fixed ratio of the naturally occurring Belladonna Alkaloids.
FELLOWS CHLORAL HYDRATE CAPSULES—A safe and effective sedative and hypnotic—will also be shown: 3¾ grain Capsules (blue and white) for daytime sedation, 7½ grain Capsules (all blue) for restful sleep. Chloral Hydrate produces a normal type of sleep without depressant aftereffects. FELLOWS representatives will be pleased to welcome you at their booth to discuss the latest developments of their Research Laboratories.
FELLOWS—The originators of Chloral Hydrate in Soft Gelatin Capsules.

Ferguson Manufacturing Company **Booth No. F-14**
Grand Rapids, Michigan

The new COLOSTOMI-PANTI for Colostomy and Ileostomy patients is the newest addition to the other DRICO Panties for children and adults with a weak bladder or bowel made by the Ferguson Manufacturing Company of Grand Rapids. Other Drico Panties consist of the Beddi-Panti for bedridden patients, Pull-on-Panti for night bed-wetters and the Ambi-Panti for extreme daytime problems connected with the bladder or bowel or menstruation problems. All Drico Panties release the mental strain patients have and allows them a new freedom from worry and they can live a normal, healthy life again because they can travel to Timbuctu without any fear of embarrassing accidents.

H. G. Fischer & Company **Booth No. B-16**
Franklin Park, Illinois

In Booth B-16, H. G. Fischer & Co. will display modern, low priced, efficient x-ray and physical therapy equipment, including FCC type approved diathermy machines. Your visit welcomed and appreciated. Interesting demonstrations gladly given—no obligation.

C. B. Fleet Company, Inc. **Booth No. B-6**
Lynchburg, Virginia

C. B. Fleet Co., Inc., cordially invites you to visit Booth No. B-6. Increasingly, during the past fifty years, to the medical profession, sodium phosphate has come to mean Phospho-Soda (Fleet), the pure, stable, aqueous solution of the two U.S.P. sodium phosphates.

Flint, Eaton & Company **Booth No. F-13**
Decatur, Illinois

The Flint, Eaton exhibit will feature Ferrolip, a new organic complex of iron. Ferrolip does not precipitate protein and thus does not cause gastrointestinal upset. Ferrolip is better absorbed as it is soluble throughout the gastrointestinal tract. The Flint, Eaton representative has an interesting demonstration to show you. Literature and samples are available.

Freeman Mfg. Company **Booth No. F-2**
Sturgis, Michigan

Makers of Orthopedic Supports

For more than sixty years Freeman has been engaged in making surgical supports and elastic hose. During that time we have worked closely with members of the medical profession. Their assistance has proved invaluable in enabling us to maintain the highest standards of quality and design.

We particularly invite your inspection of our complete line of orthopedic supports being exhibited at the show.

Geigy Pharmaceuticals **Booth No. F-8**
New York, New York

The Geigy Exhibit will feature BUTAZOLIDIN, brand of phenylbutazone, the totally new, orally effective compound with an exceptionally broad field of usefulness in arthritis and allied disorders. Also on display will be Council Accepted TROMEXAN, a safer, oral anticoagulant; EURAX Cream, a prompt-acting, antipruritic and scabicide; and PANPARNIT, indicated for symptomatic relief for Parkinson's Disease.

General Electric Company **Booth No. A-20**
Milwaukee, Wisconsin

X-Ray Department, General Electric Company, manufacturers of complete X-Ray equipment from portable diagnostic to 2,000,000-volt therapy apparatus — electrocardiograph — diathermy—X-Ray accessories and supplies. Whatever your needs, you can put your confidence in General Electric.

Gerber Products Company **Booth No. C-8**
Fremont, Michigan

Gerber's Concentrated Meat Base Formula is NEW. It is prepared to replace milk in the allergic infant's diet. It will help assure a well-fed and happy baby. Your Gerber detailman looks forward to showing you this important infant food. He also invites you to examine their COMPLETE line of baby foods. Up-to-date baby care booklets are available for your office . . . Complimentary of course.

Hanovia Chemical & Mfg. Company **Booth No. C-3**
Newark, New Jersey

See Hanovia's new diathermy for simplified controls and heavy duty performance, ultraviolet lamps for orificial and general body irradiation, Sollux Infrared Lamps, black light for diagnostic purposes and Safe-T-Aire Lamps for the destruction of air-borne bacteria. Courteous representatives will welcome your visit.

Harrower Laboratory, Inc. **Booth No. F-17**
Jersey City, New Jersey

When Harrower investigators isolated the active laxative principle of prunes they established an entirely new concept in the management of functional constipation. This principle is incorporated in two Harrower products—Prulose Complex and Isocrin. Used alone or in conjunction with one another, they cover every conceivable laxative requirement, without side effects, and with complete flexibility of individual dosage.

J. F. Hartz Company **Booth No. C-9**
Ferndale, Michigan

The J. F. Hartz Company will exhibit not only its full line of Laboratory Controlled Pharmaceuticals, but will feature the Radar Type Microtherm, and the latest in diagnostic instruments and equipment.

H. J. Heinz Company **Booth No. B-2**
Pittsburgh, Pa.

WHAT'S NEW AT THE HEINZ EXHIBIT?

1. Strained Orange Juice, Strained Cream of Tuna, Pre-Cooked Rice Cereal, and Strained Banana Custard Pudding.
2. New spill-proof plastic tumbler for weaning.
3. For office use:
   "Baby Gift Folders"
   "Nutritional Data"
   "Nutritional Observatory"
4. Literature for your patients:
   "Recipe Magic Using Heinz Strained and Junior Foods"
   "Facts About Foods"

Hoffmann-La Roche, Inc. **Booth No. E-17**
Nutley, New Jersey

DO YOU KNOW IN HOW MANY WAYS GANTRISIN CAN BE USEFUL IN YOUR PRACTICE? The Roche display will interest you because it highlights practical prescription uses for GANTRISIN—the more soluble, single sulfonamide with a wider antibacterial spectrum. You can prescribe GANTRISIN orally in tablets, syrup or pediatric suspension; for parenteral administration GANTRISIN is in ready-to-use ampuls; for local use, the ophthalmic solution, ophthalmic ointment, ear solution and nasal solution provide well-tolerated antibacterial therapy; and when you want to combine GANTRISIN with penicillin for oral administration, you can prescribe Gantricillin tablets.

Holland-Rantos Company, Inc. **Booth No. A-12**
New York, New York

Contraceptive Jelly/or Cream PLUS Diaphragm—or jelly alone? Physicians interested in medical contraception are invited to discuss this timely question with H-R convention representatives. Koromex Diaphragm plus Koromex Jelly/or Cream, means *consistently effective protection.*

G. A. Ingram Company **Booths Nos. D-4, D-5, D-6**
Detroit, Michigan

On display at our booth will be the newest types of physical-medicine equipment, such as the Ultrasonic unit and the Vaso-Pneumatic unit. The Vaso-Pneumatic machine is a new approach to the treatment of peripheral vascular diseases. We will also have a complete display of the newer wood and metal examining tables, as well as numerous diagnostic instruments. As usual, we will have a representative display of Stille and domestic surgical instruments.

C. B. Kendall Company **Booth No. C-14**
Indianapolis, Indiana

A number of ethical specialty products of interest to internists, cardiologists, and general practitioners will be displayed at our booth. Representatives, prepared to explain the features of our products, will welcome your visit, whether to chat, rest awhile or to renew old acquaintances.

Kremers-Urban Company **Booth No. F-18**
Milwaukee, Wisconsin

K-U representatives invite you to stop by and become acquainted with MILKINOL, the new instant-mixing, self emulsifying mineral oil. The new mineral oil laxative, as pleasant to take as the favorite beverage. KUSED will also be featured. This new K-U sedative provides balanced sedation all along the line.

A. Kuhlman & Company **Booth No. A-17**
Detroit, Michigan

Lea & Febiger **Booth No. A-8**
Philadelphia, Pa.

The Lea & Febiger exhibit will feature these new books and new editions: Hollander—Comroe's Arthritis and Allied Conditions; Joslin—Treatment of Diabetes Mellitus; Goldberger—Unipolar Lead Electrocardiography and Vectocardiography; Burch, Abildskov and Cronvic—Spatial Vectorcardiography; Bellet—Clinical Disorders of the Heart Beat; Pratt—Surgical Management of Vascular Diseases; Partipilo—Surgical Technique and Principles of Operative Surgery; Herbut—Gynecological and Obstetrical Pathology; Portis—Diseases of the Digestive System; Lichtman—Diseases of the Liver, Gallbladder and Bile Ducts; Cozen—Office Orthopedics; and Delario—Roentgen, Radium and Radioisotope Therapy.

Lederle Laboratories **Booth No. A-14**
New York, New York

You are cordially invited to visit our exhibit where you will find representatives prepared to give you the latest information on LEDERLE products.

Liebel-Flarsheim Company **Booth No. D-14**
Cincinnati, Ohio

THE LIEBEL-FLARSHEIM COMPANY, Cincinnati, Ohio, manufacturers of electromedical equipment for over thirty-five years, cordially invites you to visit Booth Number D-14 in which their latest short-wave diathermy and Bovie electrosurgical apparatus will be available for examination and demonstration. Capable representatives will be on hand at all times, and we hope you will stop by so that we may become acquainted.

Eli Lilly & Company **Booth No. E-1**
Indianapolis, Indiana

You are cordially invited to visit the Lilly exhibit located in space number E-1. New antibiotics, cardiac drugs, and antihistamines are featured in the display. Lilly salesmen will welcome your questions about these and other recent therapeutic developments.

J. B. Lippincott Company **Booth No. B-17**
Philadelphia, Pa.

J. B. Lippincott Company presents, for your approval, a display of professional books and journals geared to the latest and most important trends in current medicine and surgery. These publications, written and edited by men active in clinical fields and teaching, are a continuation of more than 100 years of traditionally significant publishing.

P. Lorillard Company **Booths Nos. F-5, F-6**
New York, New York

P. Lorillard Company, manufacturers of OLD GOLD and EMBASSY Cigarettes as well as BRIGGS Pipe Mixture and other famous tobacco products, will exhibit and demonstrate their new KENT Cigarettes with the exclusive Micronite Filter, which takes out up to 7 times more nicotine and tars than other filter cigarettes.

M & R Laboratories, Inc. **Booth No. B-12**
Columbus, Ohio

Your SIMILAC representatives are happy to take part in this meeting. They are pleased to have the opportunity to discuss with you the role of SIMILAC in infant feeding. They have for you the latest Pediatric Research Conference Reports. Also available are current reprints of pediatric nutritional interest.

Maico Company, Inc. **Booth No. E-3**
Grand Rapids, Michigan

MAICO products (Medical Acoustic Instrument Co.) are well known to the medical profession. Their audiometers and hearing aids are unexcelled for excellence in precision and reliability in giving service to their users.

Ninety per cent of all precision hearing test equipment used in the United States by doctors, hospitals, schools, clinics, etc., are supplied by the Maico Company, Inc.

S. E. Massengill Company **Booth No. B-5**
Bristol, Tennessee

You are invited to visit The S. E. Massengill Company booth. The new Adrenosem, indicated for the control of bleeding, is featured and representatives will be glad to discuss with you latest developments on this medication. Other recent developments of the Massengill Laboratories are on display and you are welcome to register for samples which will be mailed directly to your office.

Mead Johnson & Company **Booth Nos. E-7, E-8**
Evansville, Indiana

MEAD JOHNSON & COMPANY, Evansville. Indiana, Booths No. E-7 and E-8, will feature the change in the formulation of Dextri-Maltose, the dried carbohydrate, designed specially for use in infant formulas. In addition to Natalins, small capsules containing vitamins and minerals, designed particularly for use in pregnancy and lactation; the Vi-Sols and four Pablum Cereals will be on display.

Representatives in attendance will be glad to furnish information regarding the above products.

Medical Arts Surgical Supply Company **Booth Nos.**
Grand Rapids, Michigan **C-4, C-5**

Meet the Medical Arts Boys in Booths C-4 and C-5. They will be pleased to show you many new things of diagnostic, treatment and ease of practice value. Stop in; they will welcome you.

Medical Protective Company **Booth No. D-9**
Fort Wayne, Indiana

Specialized Service in Professional Protection Exclusively—distinctive of The Medical Protective Company —assures a "know-how" in Defense and proven Protection against loss that have most successfully met attacks arising out of the Doctor-Patient relationship for more than half a century. For authoritative information consult our representatives at Booth D-9.

Merck & Company, Inc. **Booth No. B-10**
Rahway, New Jersey

MERCK & CO., Inc., is featuring HYDROCORTONE, CORTONE, MEPHYTON, NALLINE and other medicinal preparations.

HYDROCORTONE and CORTONE are supplied in forms convenient for use in the wide range of their clinical applications: HYDROCORTONE in tablet form (20 mg.); as saline suspension for intra-articular injection (25 mgm. per cc.); as topical ointment for dermatological use (2.5 per cent); and as dental ointment (2.5 per cent).

CORTONE is supplied in tablet form for oral administration (5 and 25 mg.); as saline suspension for parenteral use (25 and 50 mgm. per cc.); as ophthalmic ointment (1.5 per cent); and in ophthalmic suspensions (0.5 per cent and 2.5 per cent).

MEPHYTON is an anitidote to anticoagulant-induced hypoprothrombinemia. It promptly reverses the pro-

thrombin deficiency induced by coumarin-like compounds.
NALLINE is the first dependable narcotic antagonist. It promptly reverses the respiratory depression that may be produced by morphine or its derivatives as well as meperidene and methadone.

Wm. S. Merrell Company **Booth No. E-9**
Cincinnati, Ohio

For prompt, effective and COMFORTABLE relaxation of gastrointestinal smooth muscle spasm, Merrell presents BENTYL Hydrochloride.
BENTYL is a high milligram potency non-narcotic antispasmodic with twofold musculotropic and neurotropic action. Bentyl is therapeutically effective in functional gastrointestinal disorders without atropine-like side actions.
BENTYL is particularly suited for prolonged administration without habituation or increased tolerance.

Michigan Medical Service **Booth No. B-1**
Detroit, Michigan



The Blue Shield exhibit exemplifies the prepayment plan sponsored by the doctors in Michigan and what that plan means to the people of the State. The family scene is typical of a family who have been relieved of the worry of catastrophic medical bills.
The photograph of the doctor and the child which makes up the Blue Shield portion of the exhibit, is symbolic of the co-operation of the doctors of Michigan. Through that co-operation Blue Shield in Michigan has led the nation in meeting the needs of the public.

Middleton's Incorporated **Booth No. E-5**
Grand Rapids, Michigan

Middleton's, Inc., bring to the busy doctor the newest in imported surgical instruments and manometers. Also those special requirements for the busy doctor to have handy in office supplies.
Stop in, see those new World Famous "Jena Glass Syringes with Luer tip" with special blue ring plunger. Complete selection of Serratex Non-slip Scissors with the ideal "positive-cut." See those "Pedia-Treat" tongue blades the kiddoa say-Ah.
Everything for the Discriminating Physician.

Miller Surgical Company **Booth No. F-1**
Chicago, Illinois

MILLER SURGICAL COMPANY will show the Miller Electro-scalpel. This unit cuts, dessicates, fulgerates, coagulates and is used for most delicate work up to light major surgery. It is a complete office unit, portable, weighing 19 pounds with cords, handles, foot switch, and accessories such as Insulated Snares, Smoke Ejector, et cetera. Also a complete line of Diagnostic Equipment consisting of Illuminated Otoscopes, Ophthalmoscopes, Eyespuds with Magnet, Transillumination Lamps, Headlights, Vaginal Speculum, Gorsch Operating Scopes and Stainless Steel Proctoscopes all sizes with magnification, Suction Tubes and Grasping Forceps.

C. V. Mosby Company **Booth No. A-3**
St. Louis, Missouri

New and interesting titles will be on display at the C. V. Mosby Company Booth No. A-3, where you are invited to visit and browse at your leisure. Among some of the more recent releases are Horsley-Bigger "Operative Surgery," Crossen "Diseases of Women," Weinstein-Foldes "Glaucoma," Ackerman "Surgical Pathology," Dock-Mandelbaum "Ballistocardiography," Jensen "Modern Concepts in Medicine," and many others.

National Drug Company **Booth No. A-26**
Philadelphia, Pennsylvania

The National Drug Company cordially invites you to visit their booth. Dimethylane, AVC Improved and Resion will be displayed. Dimethylane is a new, versatile compound for controlling symptoms of dysmenorrhea, the menopause, and associated tension states. AVC Improved is effective against an extremely wide range of vaginal tract infections. Resion offers a more rapid and more complete control of diarrhea in infants and adults; also for controlling nausea of pregnancy, food poisoning and enteric infections.

Nepera Chemical Company, Inc. **Booth No. F-10**
Yonkers, New York

The Nepera exhibit features its new product Biomydrin Nasal Solution in a plastic atomizer package which is effective against sinusitis and allergic and infectious rhinitis. Thonzonium Bromide, a new wetting agent with wide spectrum antibacterial and mucolytic properties, product of Nepera research, is included among other ingredients in the formula.
Also included will be Mandelamine, the Urinary antiseptic, and Neohetramine, a highly effective antihistamine.

Wm. R. Niedelson Company **Booth No. C-1**
Detroit, Michigan

Models of the Jones Metabolism unit, the "AIR-BASAL," the newest advance in BMR testers requiring NO oxygen tank will be shown.
The new model improved CARDIOTRON direct-writing Cardiograph with rectilinear response will be demonstrated.
PROFEXRAY equipment and accessories.

Noble-Blackmer, Inc. **Booth Nos. C-11, C-12**
Jackson, Michigan

Your friendly representatives from Jackson will again be in attendance at your Convention to show you the latest in Pelton and Castle sterilizing and office lighting equipment, office examining room furniture, surgical instruments and Birtcher shortwave electrosurgical equipment.

Ortho Pharamaceutical Corporation **Booth No. B-4**
Raritan, New Jersey

ORTHO cordially invites you to visit their exhibit at booth B-4. The Ortho display will feature PRECEPTIN® vaginal gel, their new product for conception control designed for use without a vaginal diaphragm. Preceptin vaginal gel has achieved an outstanding record of clinical effectiveness and has been widely acclaimed by the medical profession. Your inquiries on Preceptin vaginal gel are invited.

Parke, Davis & Company **Booth Nos. A-1, A-2**
Detroit, Michigan

A cordial welcome awaits you at the Parke-Davis booth. Members of our Medical Service Staff will be on hand to greet you and discuss any of our products in which you may be particularly interested.

Pelton & Crane Company **Booth No. B-13**
Detroit, Michigan

Pet Milk Company **Booth No. A-25**
St. Louis, Missouri

Specially trained representatives will be in attendance to discuss the use of Pet Milk in infant feeding, and to present many services that are time-savers for busy physicians. Miniature Pet Milk cans will be given to visitors at the exhibit.

Chas. Pfizer & Company, Inc. **Booth No. E-11**
Brooklyn, New York

Terramycin, newest of the broad-spectrum antibiotic forms a dramatic central feature of the display of Chas. Pfizer & Co., Inc., Brooklyn, New York. The newest dosage forms of Terramycin are exhibited and indications for use are described.

Procter & Gamble Company **Booth No. D-13**
Cincinnati, Ohio

The Procter & Gamble Company offers a series of time-saving leaflets for doctors: "Instructions—Routine Care of Acne"; "Instructions—Bathing a Patient in Bed"; "Instructions—Bathing Baby"; "Hygiene of Pregnancy"; "Home Care of the Bedfast Patient" and "Instructions—Sickroom Precautions." There also will be samples of other material prepared for physicians.
Mrs. Christyne Schwab, in charge.

Professional Management **Booth No. D-3**
Battle Creek, Michigan

PM

PROFESSIONAL MANAGEMENT—with 20 years of specializing in *The Business Side of Medicine*—invites you to stop at Booth No. D-3.
Offices in Battle Creek, Saginaw, Grand Rapids and Detroit.

The Quarry, Incorporated **Booth No. F-9**
Ann Arbor, Michigan

Randolph Surgical Supply Company **Booth Nos.**
Detroit, Michigan **B-8, B-9**

Riker Laboratories, Inc. **Booth No. F-19**
Los Angeles, California

Riker Laboratories, Inc., presents RAUWILOID, an alkaloidal extract of the root of Rauwolfia serpentina. A new and distinctly different hypotensive agent, outstanding for its ability to control associated symptoms and freedom from side actions. The representatives at our booth will be glad to give you complete information on this product.

A. H. Robins Company, Inc. **Booth No. B-19**
Richmond, Virginia

Physicians attending the Michigan State Medical Society are extended a cordial invitation to visit the exhibit of the A. H. Robins Company, which is this year celebrating its seventy-fifth year of service to the medical profession.
Experienced representatives will be in attendance to welcome you and answer inquiries relative to Robins' prescription specialties.

J. B. Roerig & Company **Booth No. F-16**
Chicago, Illinois

Members of the Michigan State Medical Society are cordially invited to visit the booth of J. B. Roerig and Company. Professional Service Representatives will be on hand to welcome all interested visitors.

Rystan Company, Inc. **Booth No. C-6**
Mount Vernon, New York

In addition to Council-accepted Chloresium Ointment and Solution for resistant wounds, burns and ulcerations, Rystan features Prophyllin, a new dermatologic. Prophyllin combines sodium propionate and water-soluble chlorophyll to provide a soothing, odorless, mildly bacteriostatic and fungistatic wet dressing for the treatment of a wide variety of dermatoses. Also available as ointment.

Sandoz Pharmaceuticals **Booth No. A-9**
New York, New York

We plan to feature *new* information on certain established products and complete data on Fiorinal—the newest member in our family of ethical specialties in Cephalalgia therapy.

CAFERGOT: the first effective oral therapy for migraine and related vascular headaches—clinically proven in thousands of reported cases since 1949.

BELLERGAL: valuable as an autonomic inhibitor in a variety of functional ills—the volume of favorable clinical reports is constantly increasing.

FIORINAL: a new approach to therapy of tension headache and other head pain due to sinusitis and myalgia.

A variety of informational brochures will be available and our representatives will be happy to provide full information concerning the above and other ethical pharmaceutical products of the Sandoz organization.

W. B. Saunders Company **Booth No. A-5**
Philadelphia, Pennsylvania

Mr. Ross Patterson will be on hand with the complete Saunders line.
A few new books of special interest will be GROSS—SURGERY OF INFANCY AND CHILDHOOD; PARSONS AND ULFELDER—AN ATLAS OF PELVIC OPERATIONS; NEW A.M.A. FUNDAMENTALS OF ANESTHESIA.
Your interest will be appreciated.

Schering Corporation **Booth No. B-18**
Bloomfield, New Jersey

SCHERING CORPORATION, Bloomfield, New Jersey (Booth No. B-18). Members of the Michigan State Medical Society and their guests are cordially invited to visit the Schering exhibit where new therapeutic developments will be featured.
Schering representatives will be present to welcome you and to discuss with you these products of our manufacture.

Julius Schmid, Inc. **Booth No. A-24**
New York, New York

Julius Schmid, Inc., will display here RAMSES Gynecological Products. Not only do RAMSES Flexible Cushioned Diaphragm, RAMSES Vaginal Jelly as well as all other RAMSES Gynecological Products meet or exceed A.M.A. Council Acceptance but after more than three decades of acceptance by the medical profession, those best qualified to judge are showing greater preference than ever before for RAMSES Gynecological Products.

Sealtest Dairy Products — **Booth No. A-22**
Grand Rapids, Michigan



For that refreshing pick-up between meetings, look for the red and white symbol of quality and enjoy a complimentary bottle of Sealtest Milk — known to all doctors of medicine.

Get the best—get Sealtest milk and ice cream.

G. D. Searle & Company — **Booth No. A-27**
Chicago, Illinois

You are cordially invited to visit the Searle booth where our representatives will be happy to answer any questions regarding Searle Products of Research.
Featured will be Vallestril, the new synthetic estrogen for menopausal symptoms; Pro-Banthine, the true anticholinergic drug for the treatment of peptic ulcers; and Dramamine, for the prevention and active treatment of motion sickness.

Sharp & Dohme, Inc. — **Booth No. D-18**
Philadelphia, Pennsylvania

Research data relative to oral penicillin therapy is featured at the Sharp & Dohme technical display. The exhibit endeavors to justify reliance on oral penicillin for the therapy of the majority of penicillin treatable infections, excluding fulminating diseases requiring hospitalization. A résumé of pharmacological attributes of certain nasal decongestants completes the exhibit. Expertly trained personnel will be present to discuss these observations.

Smith, Kline & French Laboratories — **Booth No. E-4**
Philadelphia, Pennsylvania

The S.K.F. Booth will feature "Spansules"—the revolutionary new oral dosage form. Just one "Spansule," taken on arising, provides a uniform supply of medication throughout the day. Thus, "Spansules" offer you three advantages: (1) smooth, uniform action, (2) prolonged therapeutic effect, and (3) convenient once-a-day dosage.

E. R. Squibb & Sons — **Booth No. A-7**
New York, New York

New Squibb products, and new brochures of useful interest to you on products already introduced, will be featured at Booth No. A-7.
As in former years, your Squibb representative again cordially invites you to visit the Squibb booth.

The Stuart Company — **Booth No. E-6**
Chicago, Illinois

You are cordially invited to visit our exhibit where you will find our representatives prepared to give you the latest information on Stuart products.

Testagar & Company, Inc. — **Booth No. C-2**
Detroit, Michigan

The professional service representatives of Testagar and Company, Inc., will present the newest development in the antacid anti-spasmodic combination theraapy, SPEROTABS No. 2. This represents a combination of two of the new dense magnesium salts plus two more antacids which combine not only to neutralize access gastric acidity without causing alkalosis, but also to form a protective coating over an ulcer crater. In clinical tests so far SPEROTABS have proven to be considerably more than just "another antacid." We will also introduce a new very effective skeletal muscle relaxant MYOMEPHETAINE.
Our complete line of injectable solutions will also be shown.

Travenol Laboratories, Inc. — **Booth No. A-4**
Morton Grove, Illinois

The Upjohn Company — **Booth Nos. D-11, D-12**
Kalamazoo, Michigan

The importance of Cortisone is expanding as clinicians discover new applications. The Upjohn Company is justly proud of its part in the development of Cortisone and in its discovery of new production methods. It is our aim to make Cortisone available to ever increasing numbers. Competent representatives welcome your inquiries and discussion.

U. S. Vitamin Corporation — **Booth No. E-16**
New York, New York

Exhibit features original, complete lipotropic therapy . . . METHISCHOL . . . the combination of five proven lipotropic agents: B_{12}, choline, methionine, inositol and liver extract. Therapeutically effective in the treatment of hypercholesterolemia as associated with atherosclerosis, coronary disease, obesity, diabetes and various forms of liver disease, including liver cirrhosis and toxic hepatitis.

Vaisey-Bristol Shoe Company, Inc. — **Booth No. E-13**
Monett, Missouri

Representatives will explain the rationale of the round heel shoe and the importance of the round heel of the foot as it affects foot function.
Jumping Jacks are not "corrective" shoes but may be used as a diagnostic aid because the foot print which appears on the sole presents a case history of the child's foot function.

Varick Pharmacal Company — **Booth No. E-14**
New York, New York

Varick Pharmacal Co., Inc.—E. Fougera & Co., Inc., cordially invite physicians to discuss with professional service representatives new preparations of importance to their every day practice. Descriptive literature and samples of all products will be available.

Westinghouse X-Ray Company — **Booth No. C-16**
Baltimore, Maryland

The Westinghouse exhibit will consist of a Westinghouse background with our own drapes, an accessory cabinet displaying accessory items pertaining to x-ray, and a four-bank illuminator with translites showing various pieces of x-ray equipment. In the booth will be several chairs for the doctors to relax.

Westwood Pharmaceuticals — **Booth No. E-2**
Buffalo, New York

Westwood introduces the first really effective skin protective—PRO-DERNA silicone cream. It protects sensitive skin against such common irritants as soap, water, wool, saliva, urine, rectal and vaginal discharges and many industrial irritants. Suggested for housewife's eczema, diaper rash, chafing, industrial dermatitis, rectal and vulvar itch and other externally caused skin irritations.

White Laboratories — **Booth No. D-7**
Kenilworth, New Jersey

White's "Phonoscope," Booth No. D-7, enables you to hear some of the heart sounds commonly encountered in clinical medicine and to see graphically displayed the associated electrocardiograms, carotid artery pulsations and apical stethograms. GITALIGIN (amorphous gitalin) which has been described as a ". . . digitalis preparation of choice" will be on display.

Winthrop-Stearns, Inc. **Booth No. E-19**
New York, New York

WINTHROP-STEARNS, INC., New York, invite you to visit booth E-19, where the following products will be featured—ALEVAIRE, nontoxic inhalant which thins sticky pulmonary secretions in bronchitis, bronchiectasis, and neo-natal asphyxia; TELEPAQUE, the new, highly effective and well tolerated oral cholecystopaque medium. Gives denser, clear cut pictures of the gallbladder and, in a substantial number of cases, also permits visualization of the biliary ducts.

Woodward Medical Personnel Bureau **Booth No. A-6**
Chicago, Illinois

To those doctors seeking to relocate, or to physicians who wish to reorganize or augment their present staff, Ann Woodward offers the facilities of the Woodward Medical Personnel Bureau. The details of excellent opportunities for above-average income, with good security and fine future potential may be investigated. You may also review the records of some exceptionally well-qualified younger doctors just finishing their formal training as well as diplomates of the specialties qualified to head departments. The complete files for these purposes may be found at Booth A-6 where Mrs. Woodward will be available to greet and assist you.

Wyeth, Incorporated **Booth No. A-21**
Philadelphia, Pennsylvania

Wyeth will feature PLAVOLEX^{R}, 6% dextran solution for use as a plasma volume expander. Among the advantages of dextran is its freedom from the danger of transmitting virus hepatitis. See also various dosage forms and combinations of BICILLIN^{R}, the new form of penicillin— strikingly low in side effects— and THIOMEIN^{R}, a smooth acting, effective mercurial diuretic, suitable for subcutaneous administration.

Zemmer Company **Booth No. F-12**
Pittsburgh, Pennsylvania

Our exhibit this year will be under the supervision of Lou Harley. Among the items on display will be Tablets Hysobel, a formula intended for the treatment of obesity.

Zimmer Manufacturing Company **Booth No. D-19**
Warsaw, Indiana

Mr. C. A. Fisher, your ZIMMER distributor, extends a most cordial invitation to the members of the Michigan State Medical Society to visit our display at Booth D-19.

Our exhibit this year will feature Femoral Prosthetic Heads, Intramedullary Pins and Instruments, Osteotomes, Gouges, Retractors, Woodruff Cut Pilot Point Bone Screws, Brown Electro-Dermatome, Pugh Nail and the new Varo-Met Pneumatic Tourniquet.

To our business friends in the Exhibit, the Michigan State Medical Society expresses sincere thanks for their splendid co-operation and very tangible contribution to the great success of the 1953 Michigan State Medical Society Annual Session.

ST. LUKE'S HOSPITAL CLINICO-PATHOLOGIC CONFERENCE

(Continued from Page 745)

2. Amyloidosis of bone marrow, lymph nodes, and right and left adrenals.

3. Bronchopneumonia of right and left lungs, with abscess formation.

4. Anthracosilicosis of right and left lungs and mediastinal and parabronchial lymph nodes.

Dr. J. C. Smith: Autopsy examination revealed extensive infiltration of bone marrow with plasma cells and widespread replacement with amyloid. The marrow of the vertebral column was soft and compression fractures were present (Fig. 1). Histologic examination revealed rows of plasma cells embedded in the clear, pink amyloid deposits (Fig. 2). The cause of death is attributed to extensive bronchopneumonia with abscess formation.

Breitenbucher and Hertzog[1] reported on ninety-five cases of multiple myeloma with autopsy examination of seventy-five. There were seventy-one male patients and twenty-four female. Seventy-four of the patients were over fifty and only eleven were over seventy. Tabulation of presenting signs and symptoms revealed the most frequent to be pain in the back or thorax, loss of weight, pathologic fracture, and a palpable mass on a superficial bone. X-ray examinations revealed the order of frequency of involved bones to be: spine 80, ribs 74, skull 55, pelvis 39, and sternum 28. The bones of the appendages were less frequently affected. Extra-osseous involvement was uncommon and affected liver, spleen, lymph nodes, and kidneys. The same laboratory determinations were not uniformly performed. However, Bence-Jones proteinuria occurred in twenty-three of fifty-four (42 per cent), hyperglobulinemia in thirty of fifty (60 per cent), hypercalcemia in twenty-two of thirty-seven (60 per cent), elevated serum phosphorus in eleven of twenty-four (49 per cent), and elevated serum alkaline phosphatase in four of seventeen (25 per cent). According to Lichtenstein and Jaffe[2], normocytic anemia occurs in approximately 70 per cent. Most patients lived less than three years although several lived considerably longer. Complications include renal failure, pathologic fracture, bronchopneumonia, and amyloidosis. Lichenstein and Jaffe[2] found 463 case reports of multiple myeloma in the literature and of these, amyloidosis was present in forty. If there are no further comments, the meeting is adjourned.

References

1. Breitenbucher, R. B., and Hertzog, A. J.: Multiple myeloma. A review of ninety-five proven cases with seventy-five autopsies. Minnesota Med., 32:986, 1949.

2. Lichtenstein, L., and Jaffe, H. L.: Multiple myeloma. A survey based on thirty-five cases, eighteen of which came to autopsy. Arch. Path., 44:207, 1947.

Two-thirds of the postoperative cancer deaths occur in patients fifty-five years of age or more.

* * *

A chest x-ray and an electrocardiogram are important preoperative studies on cancer patients.

* * *

Many patients with cancer, by the time they reach the surgeon, exhibit some evidence of nutritional deficiency.

Annual Reports

ANNUAL REPORT OF PERMANENT CONFERENCE COMMITTEE (with Michigan Hospital Association and Michigan League for Nursing) 1952-1953

This Committee met in Lansing on April 22, 1953.

The problems for consideration by this group have been less numerous this year than during previous years. The following topics were taken under consideration:

1. A formula concerning the ratio between special and general duty nurses' salaries: Due to disparity in the salary sources no solution has been reached.
2. Education of male nurses: While many nursing schools will accept men as students, there are very few who apply. This is probably due to the wide labor market now available to anyone wishing work in manufacturing production at much higher rates of pay.
3. A survey of nursing needs and sources: This survey, which will be financed by the Cunningham Drug Company Foundation of Detroit, and sponsored by all nursing agencies, will be performed by Miss Abdellah of the United States Public Health Service. The findings of this survey will be cleared through this Committee before being published.
4. A two-year Junior College course for nurses: To date this is strictly a pilot study program to be carried out at the Ford Junior College in Dearborn. As proposed, the course will consist of four semesters of which six hours per week will be practical, the remainder to be academic. It may take several years before the results are known.

Respectfully submitted,
Joseph A. Witter, M.D., *Chairman*
C. G. Clippert, M.D.
J. E. Livesay, M.D.
E. G. Merritt, M.D.
J. D. Miller, M.D.
G. J. Moriarty, M.D.
E. M. Vardon, M.D.

ANNUAL REPORT OF COMMITTEE TO REVISE THE MODEL CONSTITUTION AND BY-LAWS FOR COUNTY SOCIETIES—1952-53

A meeting of the Committee to Revise the Model Constitution and By-Laws for County Societies was held in Detroit, Michigan, on May 27, 1953. A revision was submitted, and the Committee decided to make a further study of same.

Respectfully submitted,
J. H. Schlemer, M.D., *Chairman*
F. M. Doyle, M.D.
C. W. Oakes, M.D.
P. E. Sutton, M.D.

ANNUAL REPORT OF THE MICHIGAN STATE MEDICAL ASSISTANT'S ADVISORY COMMITTEE —1952-53

On January 31, 1953, the Medical Advisory Board met with the Executive Committee of the Michigan State Medical Assistant's Society. Various queries made by the Executive Committee in the interest of good co-operation between the Assistants and the State Medical Society were discussed. Representatives of the group met with the Women's Auxiliary on March 11, in Detroit. Plans were also made for the annual meeting in connection with the State Meeting in September.

During the year it was interesting to note that a new chapter, The Genesee County Medical Assistants Society, was organized in Flint on April 12, 1953. Thirty-four girls were present at this meeting.

The Medical Assistants Society is growing rapidly and functioning admirably. It is recognized by all doctors that it is an important factor in the relationship between the doctor and his patients.

Respectfully submitted,
H. H. Heuser, M.D., *Chairman*
H. M. Bishop, M.D.
R. W. Emerick, M.D.
E. A. Osius, M.D.
R. W. Pomeroy, M.D.
E. C. Swanson, M.D.
Otto Van der Velde, M.D.
Ralph W. Shook, M.D., *Advisor*

ANNUAL REPORT OF THE SPECIAL COMMITTEE TO MEET WITH THE MICHIGAN DEPARTMENT OF SOCIAL WELFARE— 1952-53

As in previous years, your Committee continued as an integral part of a permanent Advisory Committee appointed by the State Welfare Commission. One change in membership occurred when Frank L. Doran, M.D., replaced President R. J. Hubbell, M.D.

Meetings were held in December, 1952, and February, 1953, at which times the legal provisions affecting physicians who desire to assist in placing infants for adoption was thoroughly reviewed and discussed and a draft on an article was approved for publication in The Journal of MSMS. Also, new and more restrictive definition on mental incapacity as a basis for eligibility for Aid to Dependent Children was formulated and accepted by the Welfare Commission.

Many other problems were discussed, such as, legal protection of physician in releasing information to County Bureau of Social Aid, special diets to recipients of Categorical Aid, the use of the local medical consultant and a review of how local Bureaus are functioning.

The Social Welfare Commission has again thanked us for our co-operation and desires a continuation of the Committee.

Respectfully submitted,
G. W. Slagle, M.D., *Chairman*
Frank L. Doran, M.D.
Wilfred Haughey, M.D.
L. G. Christian, M.D., *Ex-officio representing Welfare Commission.*

ANNUAL REPORT OF MATERNAL HEALTH COMMITTEE—1952-53

Meetings were held December 2, 1952, and April 16, 1953. The majority of the energy of the Committee is still expended in the work with the Michigan Maternal Mortality Survey. This is a five year survey and the case reports for years 1950 through 1952, are being reviewed by the Reviewing Committee and being studied by the Publications Committee which has in mind sending certain reports for publication within the next few months. The reports, when published, will occur in the JAMA and The Journal of the Michigan State Medical Society. The committee is hoping that these published reports will be helpful to all doctors practicing obstetrics in the State of Michigan.

The Committee continued to act as consultant and advisor to the Michigan Department of Health with respect to "Rules and Regulations for Hospitals with Maternity Departments." After about one year's experience with the rules and regulations, the Health Department reported the need for re-consideration. The entire pamphlet was therefore reviewed, and while the changes made

were not essentially changing the character of the pamphlet, it was found desirable to make a number of small corrections and alterations. Only one rule and regulation of major importance was changed, namely, the mandatory thirty-day Kahn test (thirty days before delivery). At present the rule provides that the serology examination 30 days before term is a good policy but not mandatory.

The sub-committee having to do with the parent education throughout the state is at work but as yet reports progress without being able to formulate a more detailed description of accomplishment.

One of the considerations of the Committee has to do with the future possibility of surveying the infant morbidity and mortality throughout the state similar to present survey of maternal mortality. While the Committee is in agreement that this is an excellent project, it remains to be accomplished in the future.

During the past year the committee has felt deeply the loss of three of its members—Dr. G. M. Byington by retirement, Dr. A. M. Campbell by illness, and Dr. D. M. Schuitema by death.

The Committee wishes to express appreciation for the secretarial service and attendance at its meetings of the MSMS Associate Public Relations Counsel, John B. Kantner.

Also to Fannie H. Kenyon, M.D., for her part in the review of the rules and regulations from the Michigan Department of Health.

Respectfully submitted,

P. E. Sutton, M.D., *Chairman*
C. D. Barrett, Jr., M.D.
C. M. Bell, M.D.
W. G. Birch, M.D.
A. M. Campbell, M.D.
G. B. Corneliuson, M.D.
A. L. Foley, M.D.
Francis Jones, Jr., M.D.
H. W. Longyear, M.D.
S. T. Lowe, M.D.
H. A. Ott, M.D.
H. A. Pearse, M.D.
L. C. Spademan, M.D.
D. W. Thorup, M.D.
Kathryn D. Weburg, M.D.
H. R. Williams, M.D.

ANNUAL REPORT OF CANCER CONTROL COMMITTEE—1953

The Committee held three meetings during the year: November 13, 1952; February 5, and April 30, 1953.

For the fourth successive year, the Committee sponsored and developed the Michigan Cancer Conference held at the Kellogg Center for Continuing Education, East Lansing, on October 9, 1953. The meeting was held in connection with the Annual Training School of the Michigan Division, American Cancer Society, and was co-sponsored by the Cancer Society and the Michigan Department of Health. Approximately 300 lay and professional delegates were in attendance. The following program was concluded with a luncheon, and question and answer period.

Introductory Address—Some Aspects of the Cancer Problem in Michigan
R. J. Hubbell, M.D., Kalamazoo, President
Michigan State Medical Society

Is Progress Being Made in Cancer Control?
C. Allen Payne, M.D., Grand Rapids,
Pathologist, Blodgett Memorial Hospital

Cancer Diagnostic Tests
Freddy Homburger, M.D., Boston, Mass.
Research Professor of Medicine, Tufts College Medical School

Recess

The Local Health Department's Responsibility in Cancer Control
Otto K. Engelke, M.D., Ann Arbor
Director, Washtenaw County Health Department

Cancer Control—The Price and the Payoff
Miss Margaret E. Siebert, Lansing
Michigan Federation, Business and Professional Women, Inc.

The papers given at the Conference were published in the April, 1953, issue of The Journal, MSMS.

The program of the Fifth Michigan Cancer Conference has been completed. It is scheduled to be held in cooperation with the two Michigan Divisions, American Cancer Society, at the Kellogg Center, East Lansing, October 21. This Conference, as those preceding, is being co-sponsored by the two state divisions, American Cancer Society and the Michigan Department of Health.

On request of the Michigan State Medical Society, the Committee organized a half-day cancer symposium at the Michigan Clinical Institute on March 12, 1953. Four speakers discussed various cancer problems as follows:

Diagnostic Problems in Cancer
Raymond W. Houde, M.D., New York, New York
In Charge Examining Office, Memorial Hospital

Use of Morbidity Records in Cancer Control Programs
Matthew H. Griswold, M.D., Hartford, Connecticut
Chief, Division of Cancer and Other Chronic Diseases, Connecticut State Department of Health; Lecturer in Public Health, Yale School of Public Health

The R. S. Sykes Lecture—Cancer in Childhood
Harold W. Dargeon, M.D., New York, New York
Attending Pediatrician, Memorial Hospital and St. Luke's Hospital

Diagnostic Problems in Skin Cancer
James R. Driver, M.D., Cleveland, Ohio
Association Clinical Professor of Dermatology, School of Medicine, Western Reserve University.

In October, 1952, 5,000 copies of *The Story of Cancer for High Schools* were printed and five copies were distributed to each public and parochial high school of Michigan. In many counties, the distribution was made by the local cancer unit. In other counties the manuals were sent direct to the schools. This printing was made possible by a generous contribution from the Michigan Department of Health.

Soon after these manuals were distributed, requests by schools and other groups for additional copies began to come in. The local cancer units were again circularized to determine how many additional copies were wanted in their areas, also if they would pay for such copies. The Committee had no funds for a reprinting and would have to charge for additional copies needed. The demand and the willingness to pay were such that 10,000 additional copies were printed in March, 1953. At the time of preparing this report, June 1, less than 1,700 copies of this high school manual are on hand and a second reprint order is being considered.

There has been a widespread interest in this manual from practically all states and territories as well as from several foreign countries.

During the year the Committee has been studying the programs of all cancer organizations in the state and attempting a closer co-ordination of these programs as their projects touch on statewide problems. Encouraging progress has been made in this regard.

By invitation, a Committee member assisted in a cancer seminar for high school teachers in Ottawa County during November and December, 1952.

A representative of the Committee spent two days each in Kalamazoo and Van Buren Counties speaking before high school and Parent Teacher Association meetings.

At the Michigan Clinical Institute in March, 1953, the Michigan State Medical Society presented scrolls to three committee members: To Norman F. Miller, M.D., Ad-

visor, for his unequalled record of a 100 per cent follow-up on more than 3,150 cases of gynecological cancer; to H. M. Nelson, M.D., in honor of his election as president of the American Cancer Society; and to F. L. Rector, M.D., Secretary, for his contributions to lay cancer education, especially to high school cancer education.

Members of the Committee served as Chairman and Secretary, respectively, of the Committee on Arrangements for the Testimonial Dinner to Dr. H. M. Nelson, for the honor mentioned above.

All requests for information or service the Committee could render have been complied with during the year.

The program of "Every Doctor's Office a Cancer Detection Center" has been stressed throughout the year.

The Hillsdale Plan has continued to function throughout the year. On December 30, 1952, it concluded five years of operation. A careful five-year evaluation and report on this plan is in preparation and will be available later in the year. This plan continues to enlist the interest of other local and statewide medical organizations. The State of Washington Medical Society is the latest such organization to adopt this plan.

The Secretary of the Committee has submitted his resignation effective September 30, 1953. At this time, he wishes to express to the Committee members of the past seven years and to the officers and executives of the Michigan State Medical Society, his appreciation and thanks for their support and co-operation in carrying out the duties that have been assigned to his office. He bespeaks for his successor the same cordial relationships with future Committees.

The Committee takes cognizance of Dr. Rector's resignation with regret and herewith expresses the consensus that his work has been of such importance that his replacement is essential to its effectiveness. Contemplated plans for promotion of cancer committees in county societies throughout the state makes employment of an executive secretary necessary and desirable.

The co-operation of all organizations and individuals that have made the Committee's work effective is gratefully acknowledged.

Respectfully submitted,
W. A. Hyland, M.D., *Co-Chairman*
C. H. Keene, M.D., *Co-Chairman*
F. W. Bald, M.D.
M. C. Bennett, M.D.
D. C. Burns, M.D.
L. C. Carpenter, M.D.
E. I. Carr, M.D.
R. C. Connelly, M.D.
A. B. Gwinn, M.D.
A. E. Heustis, M.D.
R. C. Hildreth, M.D.
L. E. Holly, M.D.
A. A. Humphrey, M.D.
B. E. Luck, D.D.S.
A. B. McGraw, M.D.
H. L. Miller, M.D.
H. M. Nelson, M.D.
R. E. Olsen, M.D.
H. M. Pollard, M.D.
H. W. Porter, M.D.
F. H. Power, M.D.
A. W. Strom, M.D.
J. M. Wellman, M.D.
N. F. Miller, M.D., *Advisor*
F. L. Rector, M.D., *Secretary*

ANNUAL REPORT OF THE COMMITTEE ON RHEUMATIC FEVER CONTROL—1952-53

This Committee has met five times since the last Annual Report. In addition to the routine study of the reports of the several Rheumatic Fever Diagnostic and Consultation Centers, and the reports of Leon DeVel, M.D., Medical Co-ordinator of the MSMS Rheumatic Fever Control Program, the committee has assiduously considered the educational and organizational aspects of the program.

The Committee is pleased to report the organization of two additional Rheumatic Fever Diagnostic and Consultation Centers: the Sault Ste. Marie Rheumatic Fever Diagnostic and Consultation Center, sponsored by the Chippewa-Mackinac County Medical Society, under the chairmanship of D. D. Finlayson, M.D., and the Royal Oak Rheumatic Fever Diagnostic and Consultation Center, sponsored by the Oakland County Medical Society, under the chairmanship of J. F. Pearce, M.D.

At this writing Rheumatic Fever Diagnostic and Consultation Centers are organized, sponsored, and operated by the local county medical societies in the following localities: Benton Harbor-St. Joseph, Kalamazoo, Jackson, Ann Arbor, Detroit and Wayne County (nine centers), Royal Oak, Pontiac, Lansing, Grand Rapids, Muskegon, Saginaw, Bay City, Traverse City, Petoskey, Alpena, Sault Ste. Marie, Marquette (inactive), for a total of twenty-five Centers. The cumulative Register of the several Rheumatic Fever Diagnostic and Consultation Centers as of January 1, 1953, shows a total of 3,334 registrations, each referred by the family physician for consultation and advice, 2,102 follow-up examinations, for a total of 5,436 examinations and reports to the referring physician by the several examining panels. The Alpena, Ann Arbor, Grand Rapids, Kalamazoo, Muskegon, Pontiac, Royal Oak and Traverse City Centers are to be commended for conducting the most successful programs and account for most of the achievements. The Calhoun, Genesee and St. Clair County Medical Societies have not yet joined this important educational and service program sponsored by the Michigan State Medical Society.

The Committee has prepared and distributed to the membership of the MSMS five additional "Desk Reference Cards for Rheumatic Fever" (numbers 7, 8, 9, 10 and 11) in a series designed to summarize certain phases of the rheumatic fever and rheumatic heart disease problem for ready reference by the busy physician.

An electronic amplifying stethoscope equipped with audiphone-stethoscopes for multiple listening has been purchased and placed in use in several Centers as a teaching and educational feature.

Other educational activities have included lectures and conferences on the subject of rheumatic fever and rheumatic heart disease to the following audiences: The Michigan Rural Health Conference, the Battle Creek District Nurses Association, the Chippewa Mackinac County Medical Society, the Special Teachers of the Grand Rapids Board of Education, the Kent County P.T.A. Health Institute, the Adult Education Program of the Oakland County Medical Society, the Macomb County Medical Society, the Ionia-Montcalm Nurses Association, the Oakland County District Nurses Association, the Muskegon County Nurses Association, the Wayne University Health Course for Physical Education Teachers.

Seven postgraduate fellowships for the study of rheumatic fever have been awarded for 1953. The recipients listed will attend a Comprehensive Postgraduate Course in Rheumatic Fever at St Francis Sanatorium for Cardiac Children, Roslyn, L. I., N. Y., June 1 to June 14, 1953: B. B. Bushong, M.D., Traverse City; H. E. DePree, M.D., Kalamazoo; T. R. Kirk, M.D., Petoskey; H. H. Riecker, M.D., Ann Arbor; M. J. Rueger, M.D., Detroit; J. E. Webber, M.D., Grand Rapids; and R. F. Weyher, M.D., Detroit.

A preliminary study was made of rejections by the Selective Service System, with a view of ascertaining the importance of cardio-vascular disease, and more especially rheumatic heart disease as a cause for rejection for service in the Armed Forces. In a study of 5,000 records, it was found that rejections by reason of cardiovascular disease amounted to 10.5 per cent of which 41 per cent

were rheumatic heart disease. This study was abandoned when the Committee was unable to secure the necessary funds for clerical and statistical help for its completion.

The work of this Committee is now completely and exclusively financed by grants from the Michigan Heart Association. The Michigan Heart Association in turn is a member agency of the United Health and Welfare Fund of Michigan. Earnest support of these organizations by the medical profession of the state is urged by the Committee.

The Committee on Rheumatic Fever Control hopes to merit the continued support of the House of Delegates of the Michigan State Medical Society, and indeed to every individual member of that Society in an educational and public health undertaking initiated, organized and controlled by the doctors of Michigan, for the doctors of Michigan, and for the welfare of their patients.

Respectfully submitted,
S. T. Harris, M.D., *Chairman*
P. S. Barker, M.D.
Carleton Dean, M.D.
D. D. Finlayson, M.D.
Thomas Francis, Jr., M.D.
J. H. Fyvie, M.D.
R. A. Gerisch, M.D.
M. S. Hecht, M.D.
F. D. Johnson, M.D.
B. I. Johnstone, M.D.
J. D. Littig, M.D.
E. C. Long, M.D.
L. F. McCoy, M.D.
R. J. McGillicuddy, M.D.
L. Paul Ralph, M.D.
Mr. Emmet Richards
H. H. Riecker, M.D.
D. S. Smith, M.D.
Frank Van Schoick, M.D.
L. E. Verity, M.D.
L. Fernald Foster, M.D., *Secretary*
Leon DeVel, M.D., *Medical Coordinator*

ANNUAL REPORT OF COMMITTEE ON STUDY OF GROUP HEALTH AND ACCIDENT INSURANCE—1952-53

This Committee has had several meetings to study the needs for Health and Accident Insurance for physicians of the Michigan State Medical Society and try to present a policy for the members' consideration. Different plans already in operation in many counties, health and accident policies carried by individual doctors were studied and compared. We also assembled information submitted by County Medical Societies: (1) Indicating their interest in a state-wide group insurance plan for their members. (2) Those without a County Plan. (3) Divided interest. (4) Those not interested in such plans. (5) Those who did not answer the questionnaire.

Our study showed that there is no such thing as a cheap policy. We learned that there is no standard plan that is applicable for physicians only. The existing plans seemed to apply to groups of working men without any reference to occupation. With the aid of an insurance broker, Marsh & McLennan, we drew up a set of specifications based upon:

1. Insurance reasonably obtainable: (a) Accident: Total disability—payments for five years from first day. (b) Sickness: Total disability—five years from fourth day; recommended two years from eighth to fourteenth day. We were advised that from eighth day the premium is 14 per cent higher than from the fourteenth day. The Committee felt that while many items might be desirable to many members of the profession, the rates should be kept to a minimum for the benefit of the younger practitioners.

2. The Committee thought that specific loss provision should be provided, with special emphasis on upper extremities, as loss of hand, or partial loss of hand, is worse than loss of foot.

3. Partial disability due to sickness. The Committee thought that specifications should be submitted for bids with such items included and without, so as to ascertain a comparison of cost.

4. Accidental death benefits: Instead of $10,000 maximum, we suggested $1,000 accidental death benefit for each $100 per month indemnity carried by policy holder.

5. Functional loss is to be spelled out.

6. Maximum age of entry seventy-five; maximum age insured seventy-five.

7. Schedule of benefits:

Schedule	Attained Age		Weekly Indemnity		Accidental Death
I	Through	Age 33	$50.00	Weekly	$2500.00
I-A	"	" 33	75.00	"	3500.00
II	"	" 34-49	75.00	"	3500.00
III	"	" 50-65	75.00	"	3500.00
IV	"	" 66-74	50.00	"	2500.00

The insurance and premium to be automatically changed from one schedule to another on first premium date after insured's birthday places him on next schedule.

8. Master group contract issued to Society with detailed certificate issued to insured members.

9. All members of Michigan State Medical Society, except honorary or retired members, are eligible.

10. Minimum enrollment 50 per cent of eligible members.

11. Installation procedure: Letters from Society's office followed by personal follow-up by salaried employes of insurance company without cost to the Michigan State Medical Society.

12. Many more details are in the specifications that are now in the hands of twelve first rate insurance companies who will submit proposals as to premium, rates, et cetera. When the different proposals from the several insurance companies are in hand, we shall be in a position to recommend a policy that will fulfill the needs of members of the Michigan State Medical Society for health and accident insurance. It will not be offered as a replacement of other insurance—but rather, to supplement our members' other insurance.

Respectfully submitted,
W. S. Jones, M.D., *Chairman*
L. Fernald Foster, M.D.
Mr. J. Joseph Herbert
J. D. Miller, M.D.
Arch Walls, M.D.

ANNUAL REPORT OF COMMITTEE ON INDUSTRIAL HEALTH—1952-53

The fourth "Michigan Industrial Health Day" was held March 10, in Detroit. The Committee on Industrial Health co-sponsored this annual event. E. A. Irvin, M. D., President of the Industrial Medical Association and a member of this Committee, was honored with a testimonial dinner. R. J. Hubbell, M. D., President of the Michigan State Medical Society, presented Dr. Irvin with an award for his achievement in the field of Industrial Medicine.

During the past year, committee members appeared on the programs of the Industrial Hygiene Foundation meeting, at Pittsburgh; the American Academy of General Practice, at St. Louis; the Congress of Industrial Health of the American Medical Association, in Chicago; and the Industrial Medical Association, in Los Angeles.

Your committee has been given the responsibility of arranging the program for the joint conference of the Council on Industrial Health of the American Medical Association and the Association of State Chairmen of Industrial Health Committees at the fourteenth annual

congress to be held in Louisville, Kentucky, February 23-25, 1954. Interest continues in the development of the Institute of Industrial Health at the University of Michigan. Your committee is represented by membership on the Board of Governors of the Institute.

Respectfully submitted,
M. R. Burnell, M.D., *Chairman*
W. P. Chester, M.D.
E. B. Cudney, M.D.
W. A. Dawson, M.D.
E. A. Irvin, M.D.
O. J. Johnson, M.D.
V. S. Laurin, M.D.
E. F. Lutz, M.D.
I. J. Martens, M.D.
G. P. Moore, M.D.
P. J. Ochsner, M.D.
O. J. Preston, M.D.
D. M. Richmond, M.D.
N. W. Scholle, M.D.
M. W. Shellman, M.D.
C. D. Selby, M.D., *Advisor*

ANNUAL REPORT OF ADVISORY COMMITTEE TO THE NATIONAL FOUNDATION FOR INFANTILE PARALYSIS—1952-53

The Committee held a meeting in April 1953, and after considerable discussion of the policies of the Foundation the following motion was passed:

"Inasmuch as the National Foundation for Infantile Paralysis has not sought the advice of the Michigan State Medical Society Advisory Committee to the National Foundation for Infantile Paralysis since October 26, 1950, and has not followed the recommendations of the Michigan State Medical Society Advisory Committee of the National Foundation for Infantile Paralysis made at that time or prior to that time, the Michigan State Medical Society Advisory Committee to the National Foundation for Infantile Paralysis recommends to the Executive Committee of The Council that this Committee be dissolved."

Respectfully submitted,
M. F. Osterlin, M.D. *Chairman*
E. R. Elzinga, M.D.
H. W. Harris, M.D.
B. B. King, M.D.
E. E. Martmer, M.D.
N. R. Moore, M.D.
F. H. Purcell, M.D.
H. W. Riggs, M.D.
H. H. Stryker, M.D.
F. P. Walsh, M.D.
J. E. Webber, M.D.

ANNUAL REPORT OF COMMITTEE ON IODIZED SALT—1952-53

Two meetings were held during the past year. At Lansing on June 24, 1952, our Committee met with Dr. Altland and other members of the State Health Department who were interested in our iodized salt program. On October 28, our Committee met at Wayne County Medical Headquarters in Detroit with the Commissioners Nutrition Advisory Committee and subsequently held a separate meeting of our own Committee. At these meetings an active program was outlined to further publicize the need for iodized salt. These included placards for grocery stores, education of wholesale grocers, an exhibit at the State Grange Meeting and articles for Parent and Teachers, Teachers Education Association Bulletin and several other Michigan Publications. Work along these lines has continued very satisfactorily throughout the year due to the fine cooperation from the various persons and agencies in the State Health Department who are interested in goiter control.

Two articles appeared during the past year, one in The Journal of the MSMS and another in the *Journal of Clinical Endocrinology and Metabolism* showing the leadership of Michigan in goiter control.

Respectfully submitted,
B. E. Brush, M.D., *Chairman*
H. A. Towsley, M.D., *Vice-Chairman*
J. B. Blodgett, M.D.
R. B. Burrell, M.D.
F. E. Dodds, M.D.
C. F. Lemley, M.D.
R. C. Moehlig, M.D.
D. G. Pike, M.D.
R. L. Waggoner, M.D.

ANNUAL REPORT OF ADVISORY COMMITTEE TO WOMAN'S AUXILIARY—1952-53

No problems presented themselves for solution by this Committee. Consequently, no meetings have been held.

The Committee was present as guests at the Luncheon Meeting of the Board of Directors of the Woman's Auxiliary, Wednesday, March 11, 1953, and Dr. Ivan Berlien spoke informally on that occasion.

Respectfully submitted,
Ivan C. Berlien, M.D., *Chairman*
A. B. Aldrich, M.D.
W. W. Babcock, M.D.
W. J. Butler, M.D.
W. S. Stinson, M.D.

ANNUAL REPORT OF ADVISORY COMMITTEE TO THE CANCER FOUNDATION OF THE MICHIGAN FEDERATION OF BUSINESS AND PROFESSIONAL WOMEN'S CLUBS—1952-53

The Advisory Committee to the Cancer Foundation of the Michigan Federation of Business and Professional Women held no meetings during the past year. No business was referred to this Committee from the Executive Office.

Respectfully submitted,
E. I. Carr, M.D., *Chairman*
C. H. Keene, M.D.
H. M. Nelson, M.D.
H. W. Porter, M.D.

ANNUAL REPORT OF MEDIATION COMMITTEE—1952-53

No problems have arisen during the year 1952-1953 that required a meeting of this Committee.

Respectfully submitted,
W. Z. Rundles, M.D., *Chairman*
G. A. Drake, M.D.
A. E. Gamon, II, M.D.
E. T. Morden, M.D.
R. W. Teed, M.D.
Charles Ten Houten, M.D.
E. H. Terwilliger, M.D.
Ralph Wadley, M.D.

ANNUAL REPORT OF LIAISON COMMITTEE WITH MICHIGAN STATE PHARMACEUTICAL ASSOCIATION

No problems arose that required a meeting of this Committee during the year.

Respectfully submitted,
J. D. Miller, M.D., *Chairman*
C. G. Clippert, M.D.
C. W. Colwell, M.D.
E. G. Merritt, M.D.
G. H. Rigterink, M.D.

ANNUAL REPORT OF COMMITTEE ON TUBERCULOSIS CONTROL—1952-53

The principal items brought up for discussion before the Committee are as follows:

1. *TB Legislation.*—Dr. Heustis reviewed legislation introduced to date, which would affect tuberculosis institutions. This included legislation which would compel patients to be hospitalized in tuberculosis hospitals in counties in which they reside. The amount of $7,200,000 had been proposed for state subsidy for tuberculosis patients. It was also brought out that a bill has been introduced which would increase the subsidy payments for indigent patients by the amount of $1.00 per day. There was general discussion of this legislation and its effect upon the financial difficulties of both the state and local communities.

MOTION: After discussion the Committee moved that the Legislature give thought to adequate subsidy for hospitalization in approved tuberculosis institutions in Michigan in order that adequate care may be provided for the tuberculosis patients; carried.

2. *Education.*—Discussion by members of the Committee brought out the fact that there was need for elementary education of the general practitioners, particularly as regards tuberculin testing, and the processing clinically of individuals found to be suspect by means of the mobile x-ray examinations. It was suggested that a pamphlet dealing with this particular problem be prepared, and this pamphlet is to be approved by The Council of the Michigan State Medical Society and published as a joint effort of the MSMS, the Michigan Tuberculosis Association, and the Michigan Department of Health. Mr. Werle, Secretary of the Michigan Tuberculosis Association, commented that it was a basic principle of the Michigan Tuberculosis Association to finance projects helpful to the doctor in practice and the Association would be happy to continue this policy and welcome the advice and counsel of this committee. He indicated that the Michigan Tuberculosis Association facilities would be available for producing material, but that the writing, photography, et cetera, might best be done by the MSMS Committee.

MOTION: That this Committee recommends that the Michigan TB Committee prepare material for approval by the MSMS and review by the Michigan Department of Health and production by the Michigan TB Association with the understanding that this would not preclude the Michigan Tuberculosis Association from carrying on its present program; carried.

Mobile X-Ray.—The question of follow-up on mobile x-rays was raised and the need for better follow-up was pointed out.

MOTION: That the Committee recommends that one television program of the MSMS deal with the follow-up of mobile x-ray findings; carried.

The co-operation of county medical societies in educational programs which would make better follow-up of the mobile x-ray is needed, the Committee felt. It is recommended that the Committee prepare a sample program for county medical societies complete with films, discussion leaders, et cetera, to put life behind the literature mentioned above. Mr. Werle stated that the Michigan TB Association would pay for the cost of physicians to visit county medical societies to tell the story from the physician's point of view. It was generally agreed that the effectiveness of the follow-up program depended to a great extent upon the interest shown by the local medical groups, and it was further pointed out that care should be taken so that the physician-patient relationship should not be disturbed. Discussions brought out the fact that the follow-up program was effective in proportion to the prevailing x-ray rates in the community served.

MOTION: That recognizing certain weaknesses in the follow-up program of mobile x-ray units probably due to administrative problems in getting information to medical doctors and back, and also due to lack of recognition of necessity for follow-through, this Committee recommends that more active participation of county medical societies through television, education programs, and literature be sought by those conducting the survey; carried.

MOTION: That the Tuberculosis Committee recommends that Michigan Health Council be requested to assist in implementing the educational program by way of its television program "The Court of Health" and in any other way possible using the advice jointly of the MSMS, the Michigan Department of Health and the Michigan Tuberculosis Association.

3. *Issue of JMSMS for Diseases of the Chest.*—This suggestion was given enthusiastic discussion.

MOTION: That this Committee requests that the March 1954, issue of The Journal MSMS be devoted to diseases of the chest; carried.

4. *TB Sanatorium Bed Study.*—Dr. Isbister presented a copy of this study.

5. *TB Recodification.*—An attempt was begun to consider the areas of disagreement existing in the proposed recodification of the TB laws. Since this bill is not to be introduced this year and the hour was late the Committee decided to give no further consideration to this question.

MOTION: That further consideration of these points be deferred to a later date.

Respectfully submitted,
J. W. Towey, M.D., *Chairman*
P. T. Chapman, M.D.
F. M. Doyle, M.D.
J. L. Egle, M.D.
J. F. Failing, M.D.
W. B. Howes, M.D.
J. L. Isbister, M.D.
C. E. Lemmon, M.D.
G. T. McKean, M.D.
C. J. Stringer, M.D.

ANNUAL REPORT OF THE LIAISON COMMITTEE WITH MICHIGAN VETERANS' ORGANIZATIONS —1952-53

The entire discussion at the one meeting of this committee on November 25, 1952, was the problem of securing beds for the growing number of veterans with tuberculosis and/or neuropsychiatric disorders. The State of Michigan has been discriminated against in this regard and the result has been either lack of hospitalization or the occupancy of beds in otherwise short supply at the expense of county or state budgets—a situation which the Congress never intended. Despite two visits by members of the committee to Washington and the sincere co-operation of members of the Michigan Congressional delegation, it appears that the new 500-bed Veterans Hospital at Ann Arbor will be operated as a general hospital for which there is no demonstrable need currently, and that a partial conversion of 300 beds at the Dearborn Veterans Hospital for the care of the tuberculous, essentially withdraws this number of active general beds from the area where there is the greatest density of veteran populace.

Respectfully submitted,
William Bromme, M.D., *Chairman*
R. H. Baker, M.D.
G. W. Slagle, M.D.
Mr. J. W. Castellucci, *Advisor*

ANNUAL REPORT OF THE COMMITTEE ON ATOMIC AND ALLIED PROCEDURES—1952-53

This committee was circularized in the fall of 1952, and a request made for material to be placed on the agenda for a meeting. The response was so poor and disheartening that it was decided to abandon the meeting until some future date.

Respectfully submitted,
ARTHUR A. HUMPHREY, M.D., *Chairman*
H. F. BECKER, M.D.
O. A. BRINES, M.D.
J. E. COLE, M.D.
K. H. CORRIGAN, Ph.D.
J. J. GREBE, Ph.D.
L. E. HOLLY, M.D.
TRAIAN LEUCUTIA, M.D.
H. B. LEWIS, Ph.D.
M. L. LICHTER, M.D.
A. B. McGRAW, M.D.
W. L. MALLMANN, Ph.D.
L. L. QUILL, Ph.D.
W. J. NUNGESTER, M.D., *Advisor*

ANNUAL REPORT OF THE MENTAL HYGIENE COMMITTEE, 1952-53

The Mental Hygiene Committee has been active, having five general meetings as well as two sub-committees on special assignments. On recommendation of the Committee, the Michigan State Medical Society has submitted to members of the Legislature a definition of the term Psychiatrist for use in the preparation of any statute involving the activity of a psychiatrist.

Reports by Dr. Dorsey of the Detroit Committee on Narcotic Addiction and by Dr. Heldt of the State Board of Alcoholism, were studied by the Mental Hygiene Committee. Consideration was also given at a number of the Committee meetings to the question of recommendations regarding the teaching of mental health in public schools. The possibility that the existing program of the State Medical Society might be augmented has been considered.

The advisability of including a psychiatric question in the license examination given by the State Board of Registration in Medicine was discussed at length. It was the feeling of the Committee that such a question or questions should be a part of the examination leading to the licensing of physicians in the State of Michigan.

The problem of fee schedules for psychiatric services was discussed and a tentative fee schedule was submitted to the State Medical Society for recommendation to the Michigan Medical Service. This fee schedule was also presented to the Michigan Society for Neurology and Psychiatry for their consideration and was later approved by that body.

On query from the AMA Committee on Mental Health, copies of the Mental Hygiene Committee Annual Reports for the last five years were sent to the AMA for their consideration as representing the program of the Mental Hygiene Committee.

The attitude of various insurance companies concerning the issuing of malpractice insurance policies for psychiatrists was discussed at length. It is understood that the American Psychiatric Association and the Michigan State Society for Neurology and Psychiatry are also considering this serious problem. This action of the insurance carriers apparently is based upon the assumed dangers of electro-shock therapy.

There was much discussion of the practice of psychotherapy by other than licensed physicians. On request of Dr. McIntyre, Secretary of the State Board of Registration in Medicine, the Attorney General issued an opinion indicating that any person practicing psychotherapy was in fact practicing medicine and must be therefore licensed to practice medicine. After thorough discussion, the Committee endorsed by resolution the opinion of the Attorney General.

The Chairman of your Committee is very appreciative of the interest and support of the Committee members during this past year, and it is our hope that the activities of the Mental Hygiene Committee have been of some assistance to the Michigan State Medical Society.

Respectfully submitted,
R. W. WAGGONER, M.D., *Chairman*
I. C. BERLIEN, M.D.
C. W. BRADFORD, M.D.
W. E. CLARK, M.D.
F. P. CURRIER, M.D.
W. W. DICKERSON, M.D.
J. M. DORSEY, M.D.
G. C. FINK, M.D.
T. J. HELDT, M.D.
L. E. HIMLER, M.D.
M. H. HOFFMAN, M.D.
R. F. KERNKAMP, M.D.
L. A. LaCORE, M.D.
M. H. MARKS, M.D.
F. O. MEISTER, M.D.
H. A. LUCE, M.D., *Advisor*
E. M. WILLIAMSON, M.D.

ANNUAL REPORT OF COMMITTEE ON EMERGENCY MEDICAL SERVICE—1952-53

In the past year this Committee has met as a whole on November 19, 1952, and January 2, 1953. In addition, the Sub-Committee on Training Program for Medical and Para-Medical Personnel met May 30, 1952, and the Committee on Planning and Organization met December 10, 1952. Also there have been several informal meetings of small groups from these Committees at the chairman's office and home.

We have recommended that the final medical civil defense plan of the state be built around those plans of our cities which have been developed and are in working order at the present time. The Detroit plan has been considered with interest by the Federal Civil Defense Group.

We have recommended that the State be divided into sub-divisions, corresponding to the councilor areas of the MSMS, with each having one or more representatives who will meet with the Emergency Medical Service Committee. This has been approved by The Council. These physicians will be requested to stimulate the development of medical civil defense planning locally, patterned after a state-wide plan. They would look to the Emergency Medical Service Committee, for guidance and in turn would keep the committee aware of progress and problems.

We have further recommended that a medical secretary be employed by the State Office of Civil Defense to work for that office with the Emergency Medical Service Committee of the Michigan State Medical Society and the Michigan Department of Health. The duties of this Secretary would be to co-ordinate and implement the activities of these groups in working out a medical plan satisfactory to the Michigan State Medical Society.

Several new members have been added to the Committees and Sub-Committees during the year. We believe by this time next year a well developed plan can be effected.

Respectfully submitted,
WILLIAM H. GORDON, M.D., *Chairman*
W. H. ALEXANDER, M.D.
C. P. ANDERSON, M.D.
A. G. BAKER, M.D.
W. J. FULLER, M.D.
A. C. FURSTENBERG, M.D.
R. F. HAGUE, M.D.
S. W. HARTWELL, M.D.
F. W. HYDE, JR., M.D.
LOUIS JAFFE, M.D.
E. F. KICKHAM, M.D.
M. L. LICHTER, M.D.
J. D. MILLER, M.D.
T. E. SCHMIDT, M.D.
G. H. SCOTT, Ph.D.
W. A. STRYKER, M.D.

Michigan's Department of Health

Albert E. Heustis, M.D., Commissioner

A TUBERCULOSIS MILESTONE

In 1952, for the first time in Michigan's history, tuberculosis was missing from the ten leading causes of death, according to provisional mortality figures for that year. Tuberculosis deaths recorded in the state in 1952, totaled 776 in comparison with 1,154 in 1951 when this disease was the eighth cause of death.

It was pointed out by Dr. Heustis, however, that there is no cause for complacency. Looking beyond the death rates to the facts and figures on cases, there is no evidence that tuberculosis is under control. There is no reduction in the number of newly reported cases. More patients are now hospitalized than ever before in our history. More than two-thirds of the patients entering Michigan sanatoria have advanced disease. The case finding program has lagged far behind the more spectacular and popular hospital building program.

Of the 203,860 persons x-rayed by state health department mobile x-ray units in 1952, one out of every thirty-five showed signs of chest abnormalities; one out of 100 showed evidence of possible tuberculosis; and one out of 200 showed evidence of possible active tuberculosis.

Two of the department's mobile units are at present working in the Upper Peninsula, on the plan adopted some time ago of giving better service by surveying one-half of the Peninsula in the spring and one-half in the fall.

HEALTH DIRECTOR FOR HOUGHTON-KEWEENAW-BARAGA

C. A. E. Lund, M.D., took up his duties as director of the Houghton-Keweenaw-Baraga Health Department on June 15. Dr. Lund went to the Copper Country from Middleville, Michigan, where he has been in practice for several years.

VENEREAL DISEASES STILL A MAJOR PROBLEM

A recent study of the incidence of syphilis and gonorrhea in Michigan emphasizes that, in spite of advances in treatment, the venereal diseases are still far from being under control. In 1952, over 7,300 cases of syphilis were reported, an increase of 13 per cent over the number of 1951. Reported cases of gonorrhea dropped from about 8,400 in 1951 to 7,700 in 1952.

The department's control program concentrates on two areas—helping to find the early cases and to make sure that the infected person gets adequate treatment to prevent late complications.

In promoting case finding, the department has been co-operating with the U. S. Public Health Service and the Detroit City Health Department in a training program in interviewing techniques. The effectiveness of training is proved by the fact that, prior to the program, interviewers were able to learn of an average of only 1.69 sources and contacts of each infected person. After the training program had been in operation for eighteen months, the average had risen to 4.29 sources and contacts, two-and-a-half times as many.

TRI-COUNTY HEALTH DEPARTMENT FORMED

Grand Traverse, Leelanau and Benzie counties joined, effective May 1, to form the Grand Traverse-Leelanau-Benzie District Health Department. Gerald W. Behan, M.D., will serve as director of the new unit and the main office will be in Traverse City. The Department will serve a population of 45,385.

This does not alter the number of local health departments in Michigan. It still stands at forty-eight, with sixteen multiple-county departments. It is another step forward in the continuing process of combining and recombining counties for more effective public health service.

FLUORIDATION PROGRESSES

Two more Michigan communities, St. Joseph and Tecumseh, have voted to fluoridate their public water supplies. This brings to twenty-nine the number of Michigan cities furnishing this protection to their children.

MEDICAL EXTERN PROGRAM TO BE REPEATED

Plans are being made to repeat the medical extern program carried on by the department for the first time last summer. Four medical students from the University of Michigan were hired for summer work.

The objective of the program is to give the students actual experience in public health work and to provide a few health departments with special medical personnel during the summer months. Both students and health departments felt that they benefited from the summer training experience.

WEIGHT CONTROL TO BE FEATURED IN THEATERS

A good many Michigan theater patrons will learn about weight control this summer through an 8-minute animated color cartoon, "Cheers for Chubby." The film, produced for the Metropolitan Life Insurance Company which also handles the theater bookings, has been well received by Michigan theater managers. An interestingly large number of drive-in theaters are booking the film.



1. *Dizziness . . . movement is within the head.*
2. *Objective vertigo . . . the environment is in motion.*
3. *Subjective vertigo . . . the patient himself moves in space.*



2



3

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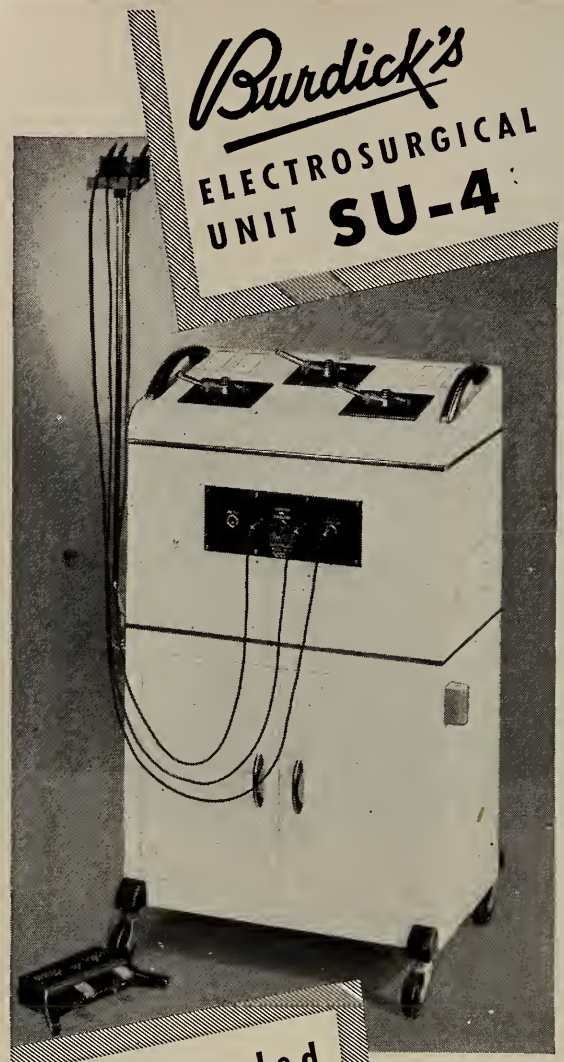
The disagreeable sensations of dizziness which physicians are frequently required to explain to patients have been described by Simonton[1] as varying from a slight sensation of confusion to severe vertigo.

While dizziness or giddiness is classified as a sensation of unsteadiness with a feeling of movement within the head, in vertigo the environment seems to spin (objective vertigo) or the body to revolve in space (subjective vertigo). Labyrinthine disturbances are likely to cause a sensation of rotation. Among the more common causes of dizziness or vertigo, this author lists: Damage to the vestibular nuclei or tracts in the central nervous system, involvement of the vestibular end organs by disease of the ear, Ménière's disease, toxicity of drugs, ocular vertigo from sudden diplopia, visual field defects, looking down from heights and motion sickness due to hyperactive labyrinthine reaction from riding in vehicles.

Dramamine (brand of dimenhydrinate) has proved effective in treating many of these disturbances. The indications for which Dramamine is now Council accepted include: Motion sickness, the nausea and vomiting associated with pregnancy, certain drugs, electroshock therapy and narcotization; vestibular dysfunction associated with streptomycin therapy; the vertigo of Ménière's syndrome, hypertensive disease and that following fenestration procedures, labyrinthitis and radiation sickness.

1. Simonton, K. M.: The Symptom of Dizziness, Arizona Med. *6*:28 (Sept.) 1949.

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Legal Opinions

PRACTICE OF CHIROPODY

Wm. J. Burns, Executive Director
Michigan State Medical Society
Lansing, Michigan

Dear Mr. Burns:

Reference is had to a recent inquiry which you have referred to me for opinion.

Your inquirer states in his letter as follows:

"One of the Sanitarium patients went down to one of the chiropodists in Battle Creek for relief of a bunion and has been given hypodermic shots (to tone her muscles and also shots to treat a dermatitis of her leg and ankle). Some time ago she had phlebitis and since then has an irritated skin of her leg and ankle, which if she rubs it breaks out with a rash. This man has been treating it by hypodermics.

"Are those treatments allowed under his license?"

Where the practice of chiropody ends and the practice of medicine or surgery begins in a particular case, is by no means simple to determine. There is no reported case in our state which indicates the distinction nor the line of demarcation. We must, therefore, have reference to the Chiropody Act (Act 115, P.A. 1915; M.S.A. 14.661 et seq.), and attempt to give it a reasonable construction.

In the first section of that act a chiropodist is defined as follows:

"Within the meaning of this act, a chiropodist sometimes called podiatrist, is defined as one who for hire or reward examines, diagnoses and treats abnormal nails, superficial excrescenses occurring in the hands and feet, including corns, warts, callosites, bunions and arch troubles or one who treats medically. surgically, mechanically or by physiotherapy, ailments of the human foot."

In Section 2 of the same act there is a proviso.

"That said certificate of qualification or license shall not authorize chiropodist to amputate the human foot or toes, or to use or administer anaesthetics other than local."

From the reading of these provisions, it would seem that not only is the chiropodist permitted to examine, diagnose and treat abnormal nails, superficial excrescences, etc., occurring on the hands and feet, but he is also permitted to treat medically, surgically, mechanically, or by physiotherapy, "ailments of the human foot," with the limitation that he is not authorized to amputate the foot or toes, or to use a general anaesthetic.

If the treatment by hypodermics indicated on the letter to you is for the purpose of treating an "ailment of the human foot," it would seem to be authorized under the act. However, I am not in position to state whether the particular case is one which may be considered "an ailment of the human foot." That is a medical conclusion. If the ailment is not essentially one of the human foot, then the chiropodist is not authorized to treat it in any manner. This approach, of course, leaves open

(Continued on Page 790)



A Marked Advance in

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1. Reich, W.J. et al. (1951), A Recent Advance in Estrogenic Therapy. I. Amer. J. Obst. & Gynec., 62:427, August. 2. Perloff, W.H. (1951), Treatment of the Menopause. II. Amer. J. Obst. & Gynec., 61:670, March. 3. Reich, W.J. et al. (1952), A Recent Advance in Estrogenic Therapy. II. Amer. J. Obst. & Gynec., 64:174, July.

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(Continued from Page 788)

the question whether a condition which is not local to the foot, but may be a general or systemic one, manifesting itself in the foot, as well as in other parts of the body, would or should be regarded as "an ailment of the human foot." This also I regard as a medical question which would be decided by a court only upon expert testimony of medical men.

Hence, the only opinion I can afford in this matter is that if in the opinion of competent medical practitioners, the ailment for which the chiropodist gives hypodermic treatment is essentially an ailment of the human foot, then he is within the authority granted by statute.

Very truly yours,
J. Joseph Herbert
Legal Counsel

May 19, 1953

* * *

FEES FOR SURGICAL ASSISTANTS

L. Fernald Foster, M.D.
Secretary, MSMS
Lansing, Michigan

Dear Doctor Foster:

Under the date of May 6, 1953, you transmitted to me for opinion an inquiry from a member of the Michigan State Medical Society, as follows:

"In this community as there is no resident staff at the hospital, a surgeon asks another physician to act as his surgical assistant. For this service the surgeon pays his assistant a fee, usually whether he is paid or not. We are concerned as to whether this is considered fee splitting. If so, and if the surgeon and his assistant are required to submit separate statements, what arrangements can be made in cases covered by Blue Cross and other insurance plans that pay but one fee to the surgeon?"

The American College of Surgeons in its publication "The Minimum Standard for Hospitals" defines fee splitting as follows:

"Fee splitting is a transaction for financial gain practiced under contract, understanding, or by consent—silent or spoken—through which a portion of the compensating fee that a specialist or practitioner receives from the patient (presumably for his own services) is paid directly or indirectly to another individual or agent who was influential or instrumental in bringing the patient to the specialist or practitioner for operation or treatment."

M. T. MacEachern, M.D., formerly executive director of the American College of Surgeons, in an article entitled "The Board's Control of Hospital Medical Care," which appeared in the April, 1950, issue of *Trustee*, listed nine principles which every physician on being appointed to the medical staff of a hospital should be required to ascribe. The ninth of these principles is given as follows: "A surgeon who has a regular assistant at operations may pay him directly. When the assistant has referred the patient to the operating surgeon, he should follow the procedure outlined in the third of these principles."

(Continued on Page 803)



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In Memoriam

JOHN D. ADCOCK, M.D., of Ann Arbor, died May 10, 1953, at the age of forty-four.

He was assistant professor of internal medicine at the University of Michigan Medical School. He first joined the medical staff of the University in 1938 as an assistant resident in the tuberculosis unit and became an instructor in 1940. He left Michigan in 1941 to join the staff of the University of Pennsylvania Hospital at Philadelphia. He returned to Michigan in 1943 to assume his present position.

Dr. Adcock was graduated from the University of Pennsylvania School of Medicine in 1935. He was a member of the American College of Physicians and the American Trudeau Association.

He is survived by his wife, Margaret, a son, John, and his mother.

MELVIN E. CHANDLER, M.D., of Flint, died April 25, 1953, at the age of eighty-one.

Until his retirement three years ago, Dr. Chandler had served the community of Flint since 1908. He was graduated from the University of Michigan Homeopathic Medical School in 1906.

Dr. Chandler interned at the University Hospital and then practiced for a year in Mount Pleasant before coming to Flint. He was a life member of the Michigan State Medical Society and a member of the Genesee County Medical Society. He was also a member of the American Homeopathy and Michigan State Homeopaths organizations.

He is survived by a daughter, Mrs. Clarence Shedd, of Flint.

ARTHUR J. JONES, M.D., of Detroit, died April 22, 1953, at the age of seventy-two.

For the past forty-five years, Dr. Jones had practiced medicine in Detroit. He was graduated from the University of Michigan Medical School in 1907. He was on the staff of St. Joseph Mercy Hospital and East Side General Hospital.

Dr. Jones was a member of the Wayne County Medical Society and a Life member of the Michigan State Medical Society.

He is survived by two sons, Robert S. Jones and Arthur S. Jones; a sister, Mrs. Norman D. Cooper; and seven grandchildren.

WILLIAM H. PARKS, M.D., of Petoskey, died April 14, 1953, at the age of sixty-five.

From 1925 to 1951 he practiced medicine in Petoskey. He was graduated from Wayne University College of Medicine in 1912. Doctor Parks was a former chief of staff of Lockwood General Hospital.

Besides his wife, Violet, he is survived by one son and four daughters. They are William H. Parks, Jr., of Petoskey; Mrs. Charles I. Miller, of Lafayette, Ind.; Mrs. Guy Conkle, Jr., Boyne City; Mrs. Sibley Felton, of

(Continued on Page 794)

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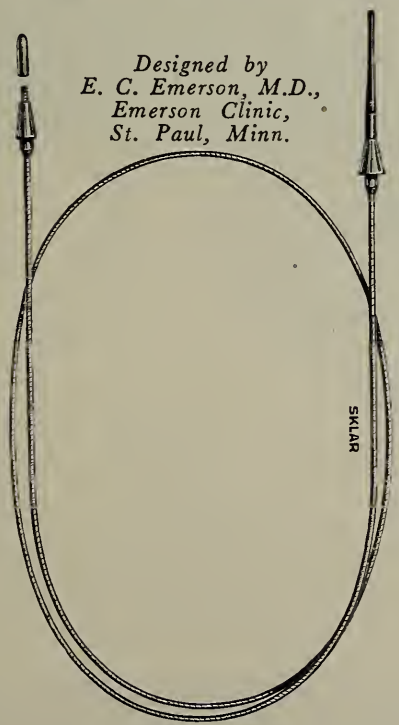
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WILLIAM H. PARKS

(Continued from Page 792)

Grand Rapids; and Miss Mary Parks, of Lafayette, Ind. He also leaves seven grandchildren.

WM. J. RYNEARSON, M.D., of Fenton, died April 12, 1953, at the age of sixty-five.

For the past thirty years, he had served the community of Fenton as a general practitioner. Previous to that, Dr. Rynearson had practiced in Hartland after his graduation from Wayne University College of Medicine in 1912. He was a member of the Genesee County Medical Society and was active in civic affairs. He had served as a member of the Fenton Board of Education for nine years and also was health officer for the community of Fenton for a number of years.

During World War I, Dr. Rynearson served as captain in the Medical Corps, with the 32nd Division. He was awarded the Silver Star.

Besides his wife, Alberta, he is survived by four daughters and three sons. They are Mrs. Patricia Knecht, of Pennsylvania; Mrs. Geraldine Matulavitch, Miss Grace Ann Rynearson, and Mrs. Mary Ruth Stevenson, all of Detroit. The sons are William Rynearson, Jr., and Richard Rynearson, who are in the armed forces, and Thomas Rynearson of Mt. Pleasant. He also leaves three brothers and two sisters and eight grandchildren.

CLYDE C. SLEMONS, M.D., of Grand Rapids, died May 7, 1953, at the age of seventy-nine.

Dr. Slemons was Health Commissioner for the Michigan Department of Health from 1930 to 1938. He also served as Grand Rapids City Health Officer from 1910 to 1930 and again from 1941 to 1952 when he retired.

Dr. Slemons was graduated from Wayne University College of Medicine in 1905. He was a member of the Kent County Medical Society and a life member of the Michigan State Medical Society. Dr. Slemons was also a Fellow of the American Public Health Association.

In Grand Rapids, Dr. Slemons pioneered in the adding of iodine to the water supply to combat goiter and set up Grand Rapids' first clinic for infant feeding. As State Health Commissioner, Dr. Slemons was credited with reorganization of the Health Department and with establishing full-time health departments in twenty-four counties.

He is survived by his wife, Isabella; two daughters, Anne and Marian L. Slemons, M.D., of Braintree, Mass., and a brother, Elmer J. Slemons, all of Grand Rapids.

HARRY STOCKER, M.D., died May 5, 1953, at the age of fifty-six.

Dr. Stocker was graduated from Northwestern University Medical School in 1923. He had practiced medicine in Detroit for thirty years.

Dr. Stocker was a member of the Wayne County Medical Society.

Besides his wife, Devera, he is survived by a daughter, Mrs. Frank Titus; a son, Jack; a brother, Ben; and two sisters, Mrs. Morris Pearl and Mrs. Maurice Mitshkun.



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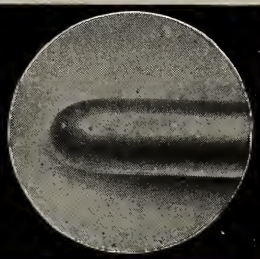
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Pantlind Hotel-Civic Auditorium, Grand Rapids
Wednesday-Thursday-Friday, September 23-24-25, 1953
YOU ARE URGED TO ATTEND!

Status of all Hill-Burton Hospital construction in Michigan, as of May 1, 1953:

Completed and in Operation.—Twenty-six projects—total cost of $21,636,341 (including federal contribution of $8,123,893) and supplying 1,466 additional beds.

Under Construction.— Sixteen projects — total cost $16,860,708 (including federal contribution of $6,417,777), designed to supply 849 additional beds.

Approved but Not Yet Under Construction.—Five projects—total cost of $5,051,700 (including $1,620,300 federal contribution), designed to supply 321 additional beds.

* * *

Michigan Delegates to the AMA House of Delegates gained extraordinary recognition this year with four important committee appointments:

W. D. Barrett, M.D., Detroit—Chairman of Committee on Officers' Reports.

G. C. Penberthy, M.D., Detroit—Chairman of Committee on Executive Session.

R. A. Johnson, M.D., Detroit—Member of Committee on Officers' Reports.

W. H. Huron, M.D., Iron Mountain—Member of Hygiene and Public Health Commission.

* * *

The New York Academy of Medicine announces its 26th Graduate Fortnight—October 19-30, 1953, on "Disorders of the Blood and the Blood-Forming Organs." For program, write the Academy at 2 East 103 Street, New York 29, N. Y.

* * *

The American Diabetes Association will launch its sixth nationwide health education and case-finding program during "Diabetes Week"—November 15-21.

William LeFevre, M.D., 289 W. Western Avenue, Muskegon, is chairman of the Sub-Committee on Diabetes Control of the Michigan State Medical Society which will spearhead the Diabetes Week drive in this State.

* * *

The State Bar of Michigan featured in its April, 1953, "Medical Jurisprudence Number" articles by the following Michigan doctors of medicine: Alfred H. Whittaker, M.D., on "The Beaumont Memorial," John R. Pedden, M.D., Grand Rapids, on "The Question of Traumatic Carcinogenesis," John H. Schlemer, M.D., Detroit, on "Artificial Insemination and the Law," George K. Swartz, M.D., Battle Creek, on "Psychiatry and the Courts."

The MSMS Legal Counsel, Mr. J. Joseph Herbert, Manistique, also had an article in the current law journal on "Does the Law Seal the Doctor's Mouth?"

* * *

CIO still fights for socialized medicine.—The CIO *News* of May 11, under the banner line "Stunted Lives Are the Price of AMA Scare Drive" made this statement:

"A national social insurance system in the field of health, along the lines labor has been demanding, remains the sound approach in spite of political difficulties."

* * *

Edwin DeJongh, M.D., Detroit, was recently elected a director of the Industrial Medical Association at its national convention in Los Angeles. Dr. DeJongh is Medical Director of the Detroit Diesel Engine Division of General Motors Corporation.

* * *

The American College of Surgeons has established the first of several contemplated scholarships in the field of research for promising young men seeking a career in academic surgery. Successful candidates receive $20,000 over a three-year period. Inquiries may be addressed to Research Scholarship Committee, American College of Surgeons, 40 E. Erie Street, Chicago 11, Illinois.

* * *

The Wayne County Medical Society's Annual Golf Tournament will be held at Tam O'Shanter Country Club on Tuesday, August 4, 1953. The WCMA Golf

(Continued on Page 798)

Thanks are expressed by JMSMS to the John Hancock Mutual Life Insurance Company for the plates used to create the four-color reproduction of painting on the cover of the April JMSMS. This beautiful color photograph of the jurist was processed on THE JOURNAL cover at very little expense, thanks to the generous loan by the John Hancock Mutual Life Insurance Company of its valuable plates.

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The new WELCH ALLYN instrument case that offers you far greater

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- BEAUTY

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Tournaments were originated in 1930 and usually attract some 300 medical golfers.

* * *

The Wayne County Medical Society Telephone Service, inaugurated in February, 1953, is on a self-supporting basis. Approximately 300 Detroit and Wayne County M.D.'s are subscribers to this 24-hour telephone service which during the first three months of operation handled 1,026 messages for doctors, answered 3,735 queries from the public regarding subscribing doctors' hours, days off, phone numbers, et cetera, and also handled 2,232 emergency calls.

A very active serviceable infant!

* * *

The AMA Council on Medical Education and Hospitals has nine full-time doctors of medicine on its staff. Each staff member has been assigned a geographical area and will review, on a biannual basis, the internship and residency programs of approved hospitals.

* * *

F. D. Dodrill, M.D., Detroit, was guest speaker at the Student American Medical Association annual convention in Chicago, June 15-17, 1953.

* * *

AMEF contributions nearing a million dollars.—More than 8,600 contributors have donated in excess of $702,000 to the American Medical Education Foundation during the first quarter of 1953. The goal for this year is $2,000,000.

* * *

Wm. J. Burns, MSMS Executive Director, spoke on "Exhibits—Your Opportunity in Physician Participation" at the 1953 Blue Cross-Blue Shield Conference in Hollywood, Fla.

* * *

Aging Pilots.—Old airplane pilots don't even fade away. They just keep pushing 'em on through. And these pilots are becoming something of a problem to aviation.

There now are more than 1,000 civilian pilots in this

(Continued on Page 800)



The complex interrelation of the social and the medical in the tuberculosis problem comes sharply into focus in the patient who leaves the sanatorium against medical advice.

Probably no one has greater influence in the adjustment of the tuberculosis patient to his hospitalization than his own family physician. His explanations—his advice—carry weight with the patient facing hospitalization, which can later be reinforced by others of the medical-social team.

But, for good or ill, the physician who diagnoses the case and refers the patient for sanatorium care begins the "education" of the patient. A good beginning will eliminate many problems of adjustment.

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$5,000 accidental death Quarterly $8.00 $25 weekly indemnity, accident and sickness	$15,000 accidental death Quarterly $24.00 $75 weekly indemnity, accident and sickness
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	Single	Double	Triple	Quadruple
60 days in Hospital	5.00 per day	10.00 per day	15.00 per day	20.00 per day
30 days of Nurse at Home	5.00 per day	10.00 per day	15.00 per day	20.00 per day
Laboratory Fees in Hospital	5.00	10.00	15.00	20.00
Operating Room in Hospital	10.00	20.00	30.00	40.00
Anesthetic in Hospital	10.00	20.00	30.00	40.00
X-Ray in Hospital	10.00	20.00	30.00	40.00
Medicines in Hospital	10.00	20.00	30.00	40.00
Ambulance to or from Hospital	10.00	20.00	30.00	40.00
COSTS (Quarterly)				
Adult	2.50	5.00	7.50	10.00
Child to age 19	1.50	3.00	4.50	6.00
Child over age 19	2.50	5.00	7.50	10.00

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(Continued from Page 798)

country past the age of 60, Dr. Ross A. McFarland of Harvard university school of public health told the world meeting of the Aero Medical Association.

But the senior fliers still are doing a good job. A study of 60 civilian air crashes shows that pilot aging had nothing to do with the crackups. Tests show that older persons are less affected by high altitude than youngsters. At 16,000 feet the young ones faint more quickly than their elders, he said.

Failing eyesight, Dr. McFarlane added, is more of a hazard in automobile driving than in piloting planes.

Of the more than 1,000 men over 60 flying civilian planes, twelve are airline pilots, sixteen are commercial fliers, and the others operate privately owned planes.

* * *

The World Health Organization budget for 1954 is $8,497,700. This budget consists of assessments against the seventy Active Member states and three Associate Members.

* * *

Injury Rate in Atomic Energy Program Reduced.—The injury rate in the nation's atomic energy program decreased by one-third in 1952, the U. S. Atomic Energy Commission announced. Injuries in the program during 1952 occurred at a rate of 2.51 per million employe-hours—33.3 per cent below the 1951 figure. The rate for all United States industry in 1951, the latest available from the National Safety Council, was 9.06 injuries per million employe-hours.

Operations contractors in the atomic energy program set a rate of 2.29 employes injured per million man-hours, compared to 2.69 in 1951. The NSC 1951 rate for the chemical industry, the nearest comparable, was 5.48.

The rate for Government-owned motor vehicles was 1.4 accidents per 100,000 miles driven by employes of AEC and its contractors in 1952, compared with 1.6 in 1951.

Fatalities likewise were reduced, dropping from twenty-four in 1951 to eleven in 1952. None was due to radiation. Nine occurred in construction, one in a motor vehicle accident, and one in loading a heavy generator which fell.

* * *

Wayne University received a grant recently from Eli Lilly and Company.

The grant will support a predoctorate fellowship in organic chemical research under the direction of Dr. Carl Djerassi, associate professor of chemistry at Wayne University.

* * *

Books on Banned List.—Twenty-one books by fifteen authors had been removed from library shelves of the United States Information Service here since the State Department issued a weeding out directive March 18. The list includes Edwin Seaver's *Pageant of American Humor* and Bernhard J. Stern's *American Medical Practice* and *Government Medical Service.*

The original directive was described as banning "the works of all Communist authors, any publication con-



tinually publishing Communist propaganda and questionable material lending undue emphasis to Communist personalities or their statements."

* * *

List Total AMA Membership at 140,000.—In writing and in speaking, physicians and others in the health field often refer to the total membership in the American Medical Association. The figure quoted often ranges all the way from 125,000 to 160,000. Since the total figure is used and referred to so often it might be well, for the sake of uniformity, to adopt a round number, and thereby avoid confusion in the public's mind.

The correct figure, based on the December 31, 1952, records of the Membership Division of the AMA Department of Records and Circulation is 140,000.

Here is a breakdown of that figure:

126,000—active members (including those exempted from the payment of AMA dues).

9,000—service members (full-time commissioned officers in the regular Army, Navy, Air Force, U. S. Public Health Service, Indian Service, and Veterans Administration).

5,000—associate members (physicians who hold a type of membership in a constituent association that does not give them the right to vote and hold office).

* * *

New High For Profession.—There were 214,667 doctors in the United States at the end of 1952, more than at any other time in history, the American Medical Association announced.

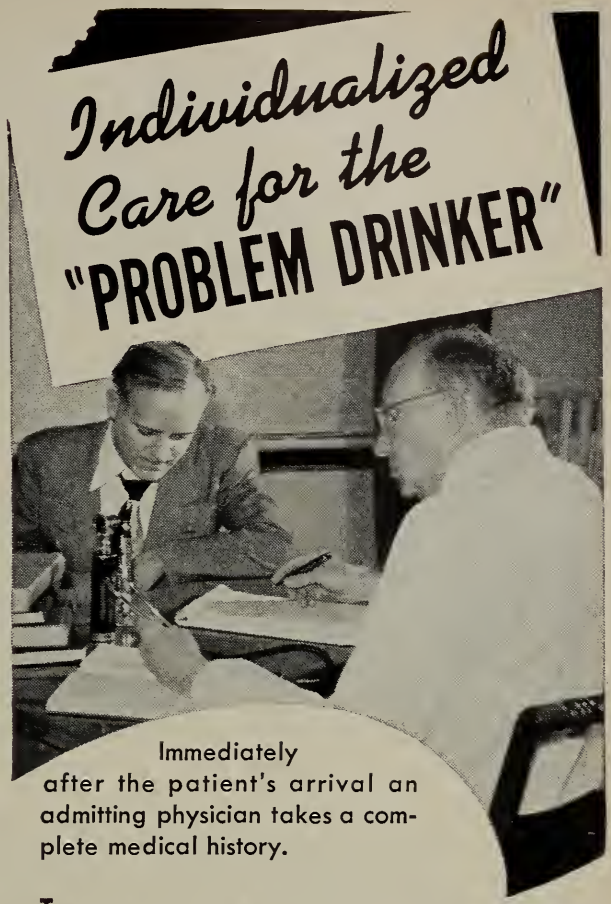
Cook County Graduate School of Medicine

POSTGRADUATE COURSES—1953

SURGERY—Intensive Course in Surgical Technic, two weeks, starting August 3, September 14, September 28
Surgical Technic, Surgical Anatomy and Clinical Surgery, four weeks, starting August 3
Surgical Anatomy and Clinical Surgery, two weeks, starting August 17
Basic Principles in General Surgery, two weeks, starting September 21
Surgery of Colon and Rectum, one week, starting September 21
General Surgery, one week, starting October 5
General Surgery, two weeks, starting October 12
Thoracic Surgery, one week, starting October 12
Esophageal Surgery, one week, starting October 19
Breast and Thyroid Surgery, one week, starting October 26
Gallbladder Surgery, ten hours, starting October 26
Fractures and Traumatic Surgery, two weeks, starting October 26
GYNECOLOGY—Intensive Course, two weeks, starting September 21
Vaginal Approach to Pelvic Surgery, one week, starting August 31
OBSTETRICS—Intensive Course, two weeks, starting October 5
MEDICINE—Intensive General Course, two weeks, starting September 28
Electrocardiography and Heart Disease, two weeks, starting October 12
Allergy, one month and six months, by appointment
CYSTOSCOPY—Ten-day Practical Course starting every two weeks
UROLOGY—Intensive Course, two weeks, starting September 28

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Subsequently, following a thorough physical examination and indicated laboratory studies, a detailed course of management can be outlined. It should be emphasized that no patient is continued under treatment unless he recognizes his problem and cooperates with the staff physicians.

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Complete information, including rates, will be furnished to physicians on request.

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A report by the Council on Medical Education and Hospitals of the AMA said there was an increase of 2,987 doctors in the U. S. during 1952.

In the eighteen-year period from 1935 to 1952 there have been 110,700 doctors added to the medical profession. The AMA said this is the result of an increase in medical teaching facilities, accelerated medical school programs, and the licensing of foreign-trained doctors.

At the close of 1952 there were 151,363 doctors engaged in private practice; 6,677 were in full-time research and teaching; 28,366 were interns, residents and physicians working in hospital administration. Another 8,166 doctors were retired and 20,095 are in government service.

* * *

The Students American Medical Association held a conference in Chicago June 15, 16 and 17, 1953. On the program were the following:

Warren Wilkins, M.D., of Grand Rapids, gave the Keynote Address.

J. S. De Tar, M.D., of Milan, gave a talk, part in symposium on General Practice as a Speciality.

F. D. Dodrill, M.D., of Detroit, gave a talk about "the Michigan Heart" demonstrating the Artificial Heart.

* * *

Social Security.—In Cleveland, June 3, Arthur J. Altmeyer, former Federal Commissioner of Social Security, was nominated president-elect of the National Conference of Social Work, the largest organization in the United States devoted to health and welfare activities. He will take office as president next year.

Mr. Altmeyer declared that President Eisenhower's Administration "could not change the Social Security system even if it wanted to."

Mr. Altmeyer became a member of the Social Security Board in 1935 and served as its chairman from February, 1937, to July, 1946, when he was appointed Commissioner. His job was abolished last April when the former Federal Security Agency was reorganized as the Department of Health, Education, and Welfare under Secretary Oveta Culp Hobby.

The former Commissioner declared in the interview that he believed the country would "improve and extend our contributory social insurance system to provide more adequate protection to more people from more of the major economic hazards which cause widespread hardship and suffering."

* * *

Mental Health TV Program.—"Our Modern Mind," a thirteen-week series on mental health, began June 7 on WJBK-TV, Detroit. It is presented each Sunday at 12 noon in cooperation with the Michigan Department of Mental Health and the Northville State Hospital. The television series is designed to shed some light on the unfortunate misunderstandings that exist about mental illness.

WJBK-TV has turned over its complete facilities as a public service for the programming of the series. Still pictures, film sequences and studio presentations are





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being used. Doctors of medicine and other experts in the field of mental health are appearing on the program. The show has a news documentary style.

Efforts are under way to publish a brochure regarding the series which will be distributed to the viewing audience. It is expected the pamphlet will be available about August 15.

* * *

LEGAL OPINIONS

(Continued from Page 790)

The third "of these principles" reads as follows: "Each doctor concerned in the care of the patient should give or send directly to the patient a detailed statement showing charges for professional services rendered."

There is no doubt that the gist of the offense is in splitting the fee with the person who referred the patient to the operating surgeon. Hence, it is my opinion that the situation which the member describes would not be fee splitting unless the assistant were the one who referred the patient to the operating surgeon.

In response to the latter part of the doctor's inquiry, it is my information that Blue Shield pays but one fee for an operation and does not pay for an assistant.

Very truly yours,

J. Joseph Herbert
Legal Counsel

May 18, 1953

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Electrocardiograms

Central Laboratory

Oliver W. Lohr, M.D., Director

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Saginaw

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THE DOCTOR'S LIBRARY

Acknowledgment of all books received will be made in this column, and this will be deemed by us as full compensation to those sending them. A selection will be made for review, as expedient.

CONTACT DERMATITIS. By George L. Waldbott, M.D., F.A.A.A., F.A.C.A., F.I.A.A., F.A.C.P., Senior Physician, Harper Hospital Chief of Division of Allergy; Assistant Physician, Grace Hospital Chief of Allergy Clinic; Formerly, Director of Allergy Clinic Children's Hospital of Michigan; Formerly, Consultant Allergist, St. Mary's Hospital and North End Clinic, Detroit, Michigan. Springfield, Ill.: Charles C Thomas, 1953.

This monograph by an author practicing in Detroit, Michigan covers the important subject of Contact Dermatitis which is the most common of the cutaneous diseases. He considers all phases such as incidence, pathology, diagnosis and treatment but more of the detail concerns the pattern of location on the skin. The book is profusely illustrated with examples of these patterns which should be a great help in the detective work required so often in determining the cause of a contact dermatitis. This book is highly recommended to those interested in the subject.

H.E.A.

PATHOLOGY OF THE HEART. Edited by S. E. Gould, M.D., D.Sc., Clinical Professor of Pathology, Wayne University College of Medicine, Detroit, Michigan; Pathologist, Wayne County General Hospital, Eloise, Michigan; Consultant in Pathology, Veterans Administration Hospital, Dearborn, Michigan; Editor, American Journal of Clinical Pathology. Springfield, Ill.: Charles C Thomas, 1952. Price $25.50.

This volume must be considered as being the first of its kind devoted to the pathology of the heart and is more than deserving of the somewhat hackneyed term of monumental. Readers of THE JOURNAL will be interested to know that of the thirteen collaborators, five are residents of Michigan, including the editor.

The sections on the development of the heart are very good and in particular the discussion on post-natal circulatory changes. The anatomy is presented in far better detail than in the most complete text on that subject and the illustrations are excellent and numerous. A thorough and extensive bibliography is appended to each chapter and as an example the one following the part on cardiac physiology is amazing in its scope and length. Outstanding sections of a generally excellent book are the ones dealing with abnormal cardiac function and its clinical application, the text and illustrations concerning malformations, coronary sclerosis including studies on prognosis, and the one on myocarditis which lists some rarely encountered and interesting conditions.

The clinical correlation is excellent and thus it recommends itself not only to pathologists and cardiologists but to any physician who performs a cardiac examination.

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POLIOMYELITIS. Papers and Discussions Presented at the Second International Poliomyelitis Conference compiled and edited for the International Poliomyelitis Congress. Philadelphia: J. B. Lippincott Co., 1951. Price $7.50.

This volume is a compilation of the papers and discussions presented at the Second International Poliomyelitis Conference held in Copenhagen, Denmark, September, 1951. It is a review of the progress in the knowledge of poliomyelitis since the first international congress held in 1948, for the purpose of providing workers in the field with a source book which will help to avoid costly duplication of work already done.

Much of the work is highly technical and is primarily compiled for those in the field of research. The discussions in particular, however, are interesting to the general medical reader.

The book is well illustrated, especially with the exhibits in the latter part of the book dealing with rehabilitation measures and is printed on glossy paper with good format.

This work is a valuable asset to the library of those with special interests in the field of polio and viral diseases.

R.W.B.

THE CIBA COLLECTION OF MEDICAL ILLUSTRATIONS. Volume I, Nervous System, A compilation of Pathological and Anatomical Paintings prepared by Frank H. Netter, M.D., with a foreword by John F. Fulton, M.D., Sterling Professor of the History of Medicine, Yale University School of Medicine. Summit, New Jersey: Commissioned and published by Ciba Pharmaceutical Products, Inc., 1953. Price $6.50.

All physicians are acquainted with the anatomical paintings of Dr. Frank Netter. We all know how beautiful and lucid is his work of art. To make this work more complete and useful the publishers have included an accompanying descriptive text discussing the illustrations. The Anatomy of the Spine, The Central Nervous System and the Pathology of the Brain and Spinal Cord are ably discussed by Abraham Kaplan, Clinical Professor of Neurosurgery, New York Polyclinic Medical School and Hospital. The section in functional neuroanatomy is presented by G. Von Bonin, Professor of Anatomy, University of Illinois College of Medicine. The section on the Autonomic Nervous System is described by Albert Kuntz, Professor of Anatomy, St. Louis University School of Medicine. Dr. John F. Fulton, in his foreword, states, "This is a work of consistently high quality. Ciba Pharmaceutical Products, Inc., in offering this new volume in their series of anatomical illustrations (at cost price), adds another to their enviable list of contributions to the progress and history of medicine." Every student of the nervous system will thank the publishers for providing such a clear and complete portrayal of the system in one atlas at the price within the reach of all.

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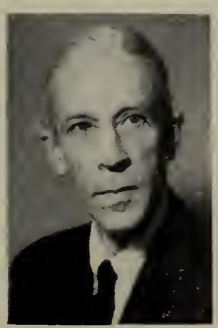
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Formula:

Each 5 cc. (approximately one teaspoonful) contain 100 mg. 'Ilotycin' as the ethyl carbonate.

Dosage:

15 pounds—1/2 teaspoonful every six hours

30 pounds—1 teaspoonful every six hours

60 pounds—2 teaspoonfuls every six hours

How Supplied:

Each package consists of one bottle containing 1.2 Gm. 'Ilotycin' as the ethyl carbonate in a dry, pleasantly flavored mixture; 45 cc. of water are added at the time of dispensing to provide 60 cc. of an oral suspension. After mixing, the suspension is stable for two weeks at room temperature.

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You and Your Business

MICHIGAN STATE MEDICAL SOCIETY ANNUAL SESSION
Pantlind Hotel-Civic Auditorium, Grand Rapids
Wednesday-Thursday-Friday, September 23-24-25, 1953
YOU ARE URGED TO ATTEND!

DOCTOR DRAFT LAW EXTENDED TO JULY 1, 1955

(Public Law 84 of 83rd Congress amending P.L. 779 of 81st Congress)

These are the final provisions of the Doctor Draft Law as passed by Congress and approved by President Eisenhower. It is expected that 7,707 medical officers will be required during the next two years for replacements; 850 physicians are eligible for release within ninety days under the new law.

Who must register: All physicians under fiftv even though previously registered for regular draft. New medical school graduates have ten days to register, ask year's deferment for internship.

Service required: Maximum 24 months if less than 9 months prior active duty. 21 months with 9 to 12 months prior active duty. 18 months with 12-15 months prior active duty. 15 months with 15 or more months prior active duty. 0 months with 21 or more months prior active duty.

Changes in priority: 1. Lowers from 21 to 17 months the amount of active duty required to move from priority 2 to priority 4. 2. Credits *all active duty of any nature* subsequent to September 16, 1940.

Definition of prior active duty: Time spent since September 16, 1940, on: 1. Active duty with Army, Navy, Air Force, Marines, Coast Guard, USPHS. 2. Non-military duty as conscientous objector. 3. Wartime service with World War II ally of United States. 4. Service with Panama Canal Health Dept. during World War II.

Who is eligible for deferment: Upon advice of state or local medical advisory committees local boards may defer for: 1. Essential to community. 2. Extreme personal hardship. 3. Certain teaching posts. 4. Essential research.

Pay: $100-a-month equalization pay continued for all commissioned physicians.

Is it possible to resign commission?: Yes, upon completion of obligated service. No, if obligated for active duty or in training in reserve component. If obligated under doctor draft—doctors *are discharged* upon completion of active duty.

Are aliens eligible for commissions?: Yes.

How is USPHS duty credited?: Full credit. But PHS Surgeon General required to approve termination of commission if time served is to be credited under Doctor Draft Law.

Other points: Selective Service has nothing to do with determining commission or promotion to which a doctor is entitled. Appointment of medical officers in grades commensurate with their professional education, experience or ability.

ONLY FOUR IN 106 YEARS

Michigan has had four presidents of the American Medical Association since that organization first met in Philadelphia in the year 1847.

Zina Pitcher, M.D., Detroit, served as AMA President when it met in Detroit in 1856. William Brody, M.D., Detroit, served as President at the St. Louis session in 1886, thirty years after the Detroit session.

After a span of 19 years, Donald McLean, M.D., of Detroit, was president of the AMA in 1895, Baltimore session.

Victor C. Vaughan. M.D., of Ann Arbor, served at the Atlantic City session of 1914, nineteen years after Dr. McLean was president.

No Michigan man has been elected president of the American Medical Association since 1914—forty years come June, 1954!

HIGHLIGHTS OF EXECUTIVE COMMITTEE OF THE COUNCIL

June 24, 1953

Eighty items were presented to the Executive Committee of The Council on June 24. Chief in importance were:

- *Beaumont Memorial:* The program of the cornerstone laying, scheduled for July 17, 1953 was approved. Wood carvings by W. M. LeFevre, M.D., of Muskegon, made for the Beaumont Memorial, were acknowledged with a vote of sincere thanks. Dr. LeFevre's further offer to make chairs and tables—exact reproductions of the furniture of the 1820 period—also was accepted with thanks.
- *The monthly financial reports* as well as bills payable were studied and approved.
- *Committee Reports*—The following reports were given consideration: (a) Mental Hygiene, meeting of May 20; (b) Committee on Postgraduate Medical Education, May 21, including

(Continued on Page 820)

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4 *In equal oral doses, no other barbiturate combines quicker, briefer, more profound effect.*

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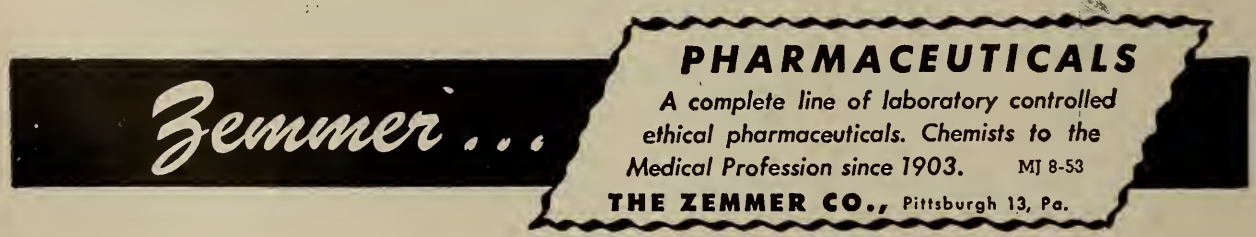
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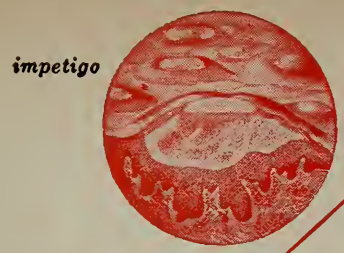
HIGHLIGHTS OF THE COUNCIL

(Continued from Page 818)

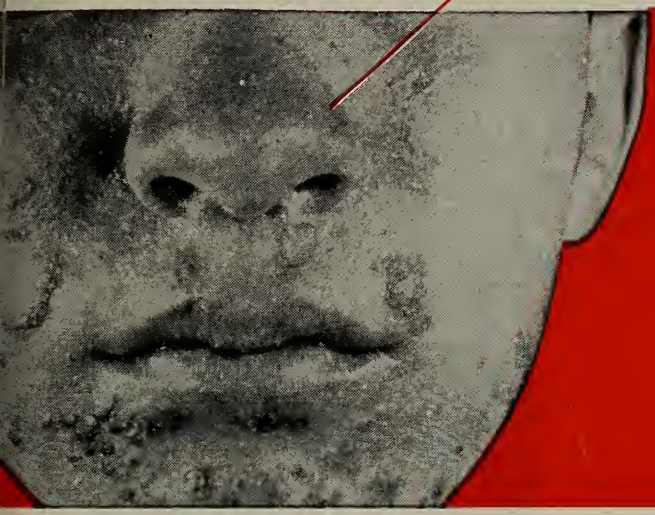
report of Subcommittee on Intern Training as a Means of Procuring Physicians for Michigan. In addition, the invitation from the Associated States Postgraduate Committees asking Chairman H. H. Cummings to represent one of its districts was endorsed; (c) Medical Jurisprudence Committee, May 27; (d) Committee re Suggested Essentials for Constitution and By-Laws, May 27; (e) Cancer Co-ordinating Committee, June 17; (f) Beaumont Consultative Committee, June 17; (g) Medical Advisory Committee to Michigan Hospital Service, June 18; (h) Committee to Study Basic Science Act, June 18; (i) Committee on Group Health and Accident Insurance, June 24, which presented an analysis of proposals offered by certain insurance companies which was referred to The Council for consideration on July 16. Chairman W. S. Jones, M.D., reiterated that MSMS would have no health and accident insurance plan until The Council has accepted one which would become effective only after approval by the House of Delegates in September, 1953.

- *President R. J. Hubbell, M.D.,* reported that the 1953 Biddle Lecturer would be U. S. Senator Homer Ferguson who will speak in Grand Rapids, Wednesday evening, September 23.
- *The name of Max R. Burnell, M.D., Detroit.* it was reported, had been nominated by the Michigan Industrial Medical Association for the Physician's Award of the President's Committee on Nationally Employ the Physically Handicapped Week.
- *Letter from John Alexander, M.D.,* Ann Arbor re insurance company fee schedules was referred to the Committee on Uniform Fee Schedule for Governmental Agencies.
- *Non-service-connected disabilities:* Recent meetings with leaders of the American Legion and Veterans of Foreign Wars leaders re the AMA House of Delegates' action (June 5, 1953) on this subject was reported. The Chairman of The Council was authorized to arrange a conference between AMA officials and representatives of the four Michigan veterans organizations if possible.
- *Commemorative stamp re the Beaumont Memorial,* for issuance in July, 1954, may be authorized by the Postmaster General, according to report of Editor Wilfrid Haughey, M.D., Battle Creek.
- *Suggestion to increase attendance at MSMS 1953 Annual Session* by offering to sponsor an out-of-Michigan speaker at a meeting of the county medical society having the greatest percentage of attendance in September in Grand Rapids, was approved.
- *Dates for future MSMS Annual Sessions* and future Michigan Clinical Institutes, up to and including the year 1958, were decided.
- *Evaluation cards* re scientific speakers and concerning the Annual Session in general, for submission to members both during and after the 1953 MSMS convention, were authorized.
- *Personnel of the 1954 Michigan Clinical Institute Committee on Arrangements* was approved; also Press Relations Committee personnel.
- *Request of Ciba Pharmaceutical Products, Inc.,* Summit, N. J., to prepare and distribute an issue of "Ciba Reports" based on the 1953 MSMS Annual Session in Grand Rapids was granted.
- *Monthly reports* of The Council Chairman, the President, the President-elect, the Secretary, the Treasurer, and the Editor were presented and the various items approved.
- *Legal Counsel J. Joseph Herbert* presented opinions on (a) keeping records of deceased patients; (b) securing loyalty oath from hospital staff members, and (c) the unqualified use of the term "physician and surgeon" by osteopaths.
- *The monthly report of the Public Relations Counsel* included résumé of Michigan Senate Bill 1252 (Section 11); exhibit at State Fair in September; MSC publication "Health in Michigan"; and requests for advice re program of forthcoming Michigan Rural Health Conference.
- *Matters of mutual interest* were discussed with A. E. Heustis, M.D., Michigan Health Commissioner, during which the Executive Committee of The Council approved the Commissioner's request for an increased supply of gamma globulin for the State of Michigan.
- *A vote of thanks* to Dr. and Mrs. Foster for their hospitality in opening their home for the June 24 meeting was placed on the minutes.





impetigo



skin infections and antibiotics



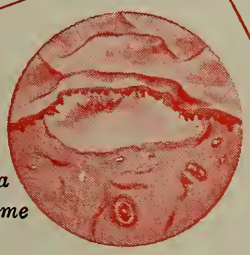
acne



pyoderma



folliculitis



erythema multiforme

Since cutaneous bacterial infections "probably account for more disability than any other group of skin diseases,"[1] the availability of broad-spectrum Terramycin has been particularly helpful in controlling these common disorders. This pure, well-tolerated antibiotic is markedly effective against the wide range of organisms often implicated as primary or secondary pathogens in skin disease. Successful clinical experience[2,3,4] in the treatment of impetigo, acne, pyodermas, erythema multiforme and other cutaneous infections recommends the selection of Terramycin as an agent of choice in common diseases of the skin. Terramycin is supplied in convenient oral and intravenous dosage forms.

1. *Bednar, G. A.: South. M. J. 46:298 (March) 1953.*
2. *Wright, C. S. et al.: A. M. A. Arch. Dermat. & Syph. 67:125 (Feb.) 1953.*
3. *Robinson, H. M. et al.: South. M. J. (in press).*
4. *Andrews, G. C. et al.: J. A. M. A. 146:1107 (July 21) 1951.*

Terramycin

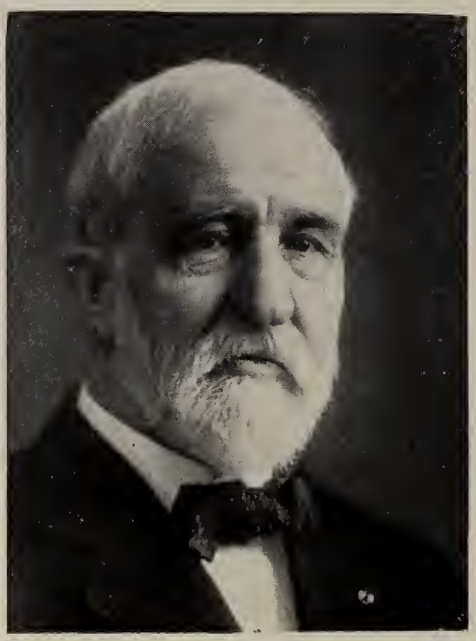
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University of Michigan, Ann Arbor



William F. Breakey, '59

Ninety-four years ago the first link in a remarkable family chain was forged at Commencement time in Ann Arbor. William Fleming Breakey was given his medical degree that day, and shortly after began his fifty-five-year career in medicine. On July 13, 1953, Barry Austin Breakey received a similar degree and Ann Arbor again was the site of the ceremony.

Barry Breakey is the great-grandson of the "medic of '59" and this in itself is worthy of no little note. But it is only one-half the story. In between those Commencements of 1859 and 1953 there have been two other significant graduations—one in 1894, when James Fleming Breakey received his medical degree, and one in 1924, when Robert Stevens Breakey achieved a similar recognition. The first named was grandfather to Barry; the second is his father (see pictures). William Fleming Breakey, '59M; James Fleming Breakey, '94M; Robert Stevens Breakey, '24M and Barry Austin Breakey, '53M.

Four generations of the family—each a graduate of the Medical School of the University of Michigan.

Perhaps some other medical school can boast of a similar family. In medical education Michigan is not particularly "aged." But though youthful it already is proving itself to be very much of a



James F. Breakey, '94

"family institution." This characteristic is to be considered the more remarkable in view of its status as a state university. Three years ago this magazine began to publish annually the rosters of Freshmen who were second—or third or fourth—generation students. The length of the roster was astounding at first, but as each succeeding listing indicated the large number of sons and daughters choosing their "family school," analysis developed at a few other universities in the same category—even the older schools of the East.

These four Michigan doctors have other things in common than the Breakey name. Great grandfather, grandfather and father have all served their country in war—the patriarch in the Civil War; his son in World War I; and Robert Breakey in

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Copied by permission from *The Michigan Alumnus*, June 6, 1953.

World War II. And Barry anticipates he may be called by Uncle Sam to follow in the footsteps of the others. Further—William Breakey entered the faculty of the Medical School at Ann Arbor as the first professor of Dermatology. For eighteen years James Breakey was a member of the faculty; while Robert Breakey followed his internship at University Hospital with a service on the faculty which lasted until 1929. Barry has been selected for a University Hospital internship, but the teaching phase of his family tradition must currently be left for the future to decide.



Robert S. Breakey, '24

When the great grandfather studied at Ann Arbor the medical course was of two years' duration —with the second year being practically a simple repetition of the first. The grandfather was in the first Michigan class which underwent four years of



Barry A. Breakey, '53

study for a degree. The father studied under still different conditions, pre-medic requirements having been introduced during his time. And Barry found even more strict requirements facing him as he embarked on his education.

A single family encompassing practically the entire history of growth of medical education at Michigan!

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Exchange of Scientific Programs Between County Medical Societies

By H. E. Cope, M.D., *Lansing*

Twenty-five years ago, the Ingham County Medical Society held its first spring clinic. Members of other county medical societies were invited to this meeting. The attendance at this clinic and at the annual clinics held subsequently indicated that this type of program served a definite purpose in continuing postgraduate education. The fact that by 1948 the neighboring counties of Genesee, Calhoun, Jackson and Kent were also scheduling large spring meetings is further evidence of the value of these programs. The increasing number of meetings in this geographic area, together with the spring Institute of the Michigan State Medical Society and the increasing number of clinic days scheduled by the hospitals of Wayne County, also represented a potential for conflict. In order to forestall such a conflict in this local area the Chairmen of the Program or Clinic Committees of the local medical societies met for several years together with representatives of the State Medical Society well in advance of the scheduling of their meetings to work out mutually satisfactory plans. These conferences served several good purposes. They afforded a means of mutual interchange of dates and plans. They also established a mechanism for the clearance and publication of this information through the Executive Office of the State Medical Society and The Journal. With the establishment of the pattern for these clinics and the mechanics for dissemination of information, these conferences seemed to have served their purpose and were discontinued.

The possibility of increasing the field of utilization of the scientific programs of the county medical societies in postgraduate education has recently occupied the attention of a number of different groups. The State Medical Society has expressed an interest in the development of such an idea. The possibility has come up for discussion, completely independently, in the meetings of the Executive and Public Relations Committees of our county medical society. There seems to be a very widespread belief that a mechanism should be developed for wider dissemination of the information and experience brought to the county medical societies by speakers of national repute. In most instances, such speakers are scheduled well in advance and it would not be at all difficult to clear this information through the Michigan State Medical Society and The Journal. Nor would it be difficult to keep the secretaries and the Program Committees of adjacent county medical societies informed of such meetings.

There are problems largely in the housekeeping field which make us hesitant about proposing that county medical society meetings be opened for general attendance. The success of any meeting depends upon the adequacy of the planning of the physical facilities as well as the capabilities of the speakers. When dinner meetings are held, planning must include firm dinner reservations. A large and unanticipated attendance at any such meeting could and probably would disrupt the physical facilities and lead only to disappointment. At the other extreme, no county medical society could long cover any number of hotel dinner reservations which were not utilized at the last minute. However, it still seems desirable that these facilities be more widely utilized. We would welcome suggestions and would be glad to meet with other interested groups to discuss the possibilities and, if possible, formulate a workable program.

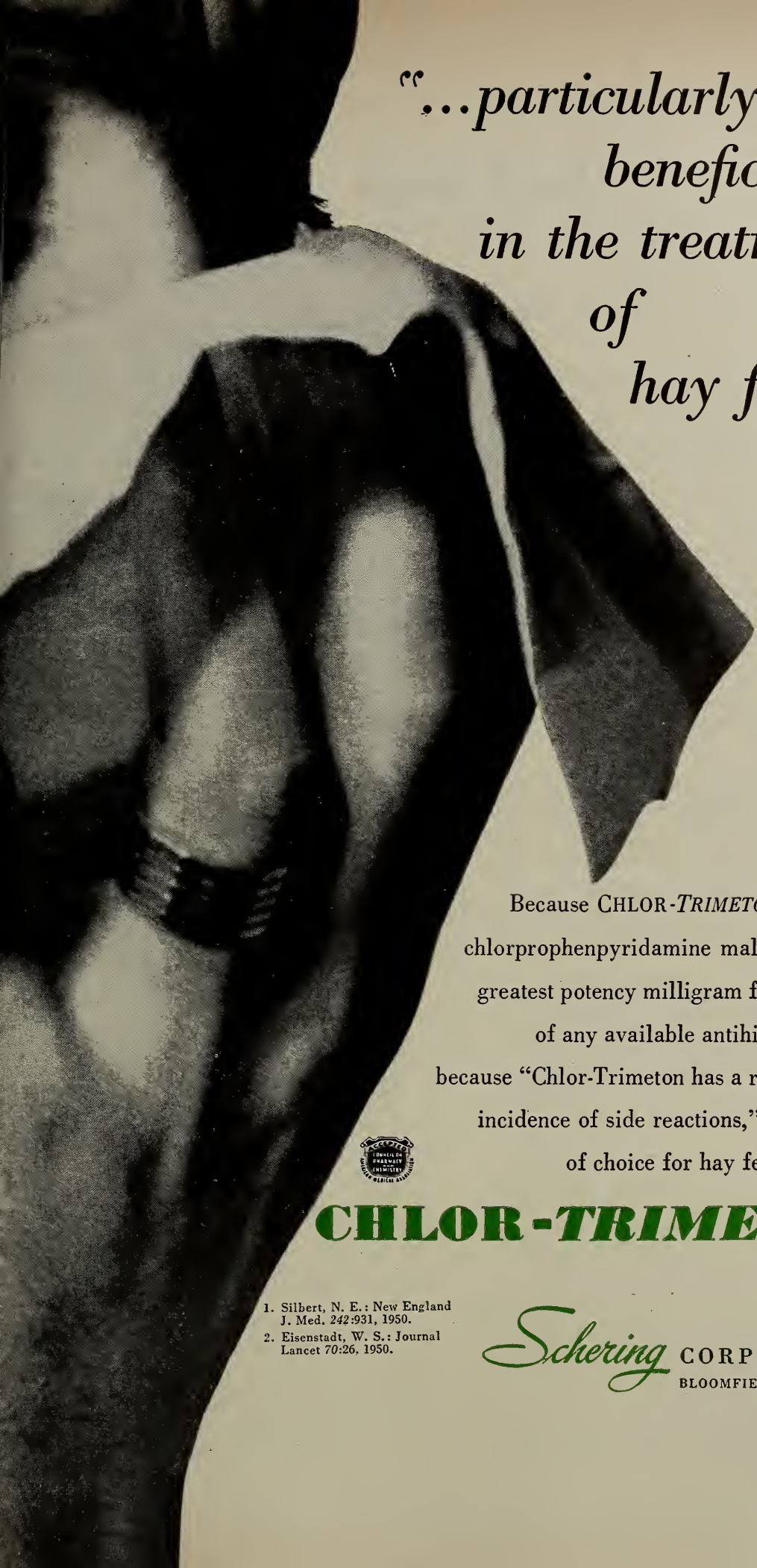
Presented at MSMS Secretaries Conference, February 25, 1953, Lansing.

DOCTORS RATED LAST AS BUSINESS SPENDERS

Physicians are rated last on the list of spenders for entertainment for business purposes, according to a study of members of the Diners' Club, a credit card system covering hotels, night clubs, florists, et cetera.

Advertising agency executives are the biggest spenders and a shade below are public relations men, closely followed by manufacturers' representatives and distributors and theatrical booking agents.

The Diners' Club is an organization of more than 100,000 members, whose cards cover some 3,000 establishments.—*AMA Secretary's Letter.*



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1. Silbert, N. E.: New England J. Med. *242*:931, 1950.
2. Eisenstadt, W. S.: Journal Lancet *70*:26, 1950.

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Heart Beats

A CHERISHED LETTER

From time to time, we have all received letters which we have cherished for various reasons. The following letter was recently sent to the Executive Secretary of the Michigan Heart Association by Mr. A. G. Kettunen, State 4H Club Leader in Co-operative Extension at Michigan State College and National Chairman of the 4H Club Foundation. Mr. Kettunen suffered a heart attack several weeks ago and is now at home convalescing. The letter is being reprinted in Heart Beats through the courtesy of the Michigan State Medical Societv because of the timely and educational message which it carries in a very delightful and humorous manner. Reprints of this highly interesting letter will be supplied free of charge by writing to the Michigan Heart Association, 4421 Woodward Avenue, Detroit 1, Michigan.

Dear Mr. Guy:

I want you to know that I have appreciated very much the many messages of cheer which I received and am receiving during my enforced absence from the office. Thank you so much for yours. They help tremendously when a fellow is cut away from everything.

I would like to write everyone a note of appreciation but at this moment I do not feel equal to undertaking that task. Therefore, I am resorting to this type of mimeographed communique to tell you why I am away from the general routine.

This is Coronation Year. I could not attend the event, so I thought I would honor Her Majesty Queen Elizabeth II by joining the "Coronary Club." I arrived at this decision in a rather hurried manner. I discovered that I could not handle all the details myself, friend wife was not at home, so I called upon a good friend for advice and counsel. In his usual expeditious manner, he informed me that he would take care of everything and that he knew a man of influence who could get me into the club.

In a few minutes I met the man of influence—my family Doctor of Medicine. I passed all preliminary tests, so I was informed that I was ready to be initiated into the Coronary Club.

I left home in a contrivance known as an ambulance. It looks like a hearse—but you ride on a cot instead of in a box. They ride you backwards, to confuse you —so that you will not be able to find your way home.

I was taken to the Edward Sparrow Hospital, the Coronary Club House, located on Michigan Avenue in Lansing, Michigan. Please do not think that because of the name "Sparrow" that it is a *flighty outfit*. On the contrary, the members are slow, deliberate and with both feet on the ground. Every move they make is a result of slow and painstaking effort.

I am buying a room in the Club House, but I do not know if I will ever own it. There is a bed in the room invented by Henry Ford. It has to be cranked like a Model T, when you want to adjust the person on the bed into different positions.

After you are on the bed, that is when the initiation tests begin. First, they put you into an oxygen tent. That is done to see if you are an outdoor man, one who can rough it. I have slept in tents before, so I passed the test O.K.

They do not want any hot tempered members in the club, so they check your temperature three or four times a day. Then they go to the other extreme, they try to baby you by feeding you as if you were a mere infant. I passed that test O.K. in a couple of days.

Now the bath—you have one every morning, instead of just Saturday nights. However, I did not see any showers or tubs. The nurse comes in with a small basin of water, like the wash basin in which we washed our face and hands down on the old farm. That basin is your bath tub!

They sure are careful of their membership, you must pass a series of blood tests. A sample of your blood is taken each morning and sumbitted to the Coronary Committee for examination. Your active membership depends much on these tests.

Another test which I had to pass, was the Electrocardiogram. Whether this was given to test my ability to stand a shock or something else, I don't know. It was not a lie detector, because thev did not ask me any questions. Anyway, after a half dozen trials, I got by that one, too.

One thing which concerns me is the social life at the Club. The main activities which I observed were reading, listening to the radio, watching television, quiet visits and sleeping. This probably could be remedied by electing a more active social committee or by providing bowling alleys, pool and billiard tables, a bar, card rooms, ball room gymnasium, et cetera.

One thing members of the Club may feel proud about, that is the excellent staff ready to serve vou at all times. There are many pretty young girls and some (pretty) old ones, too.

One of the important features of the Coronary Club is their constant drive for new members. This is handled by the Membership Committee. This committee has presented the following suggestions for interested applicants:

1. Your job comes first, personal considerations are secondary.
2. Go to the office evenings, Saturdays, Sundays and holidays.
3. Take the brief case home on the evenings when you do not go to the office. This provides an opportunity to review completely all the troubles and worries of the day.
4. Never say *NO* to a request—always say *YES*.
5. Accept all invitations to meetings, banquets, committees, et cetera.
6. Do not eat a restful, relaxing meal—always plan a conference for the meal hour.
7. Fishing and hunting is a waste of time and money

(Continued on Page 866)

ERYTHROCIN*

...A SELECTIVE ANTIBIOTIC



ORALLY EFFECTIVE

against staphylococci, streptococci and pneumococci —especially indicated when patients are allergic to penicillin and other antibiotics or when the organism is resistant.

A DRUG OF CHOICE

against staphylococci—because of the high incidence of staphylococcal resistance to other antibiotics.

A DRUG OF CHOICE

because it does not materially alter normal intestinal flora; gastrointestinal disturbances rare; no serious side effects reported.

ADVANTAGEOUS

because the special acid-resistant coating developed by Abbott—and Abbott's built-in disintegrator—assure rapid dispersal and absorption in the upper intestinal tract.

Use ERYTHROCIN

in pharyngitis, tonsillitis, scarlet fever, pneumonia, erysipelas, osteomyelitis, pyoderma and other indicated conditions. Abbott

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Erythromycin, Abbott, *Crystalline*

AMA News Notes

PRESIDENT EDWARD J. McCORMICK, M.D.

In his address before the House of Delegates President McCormick outlined a nine-point program for continued improvement in the medical care setup for the nation:

"1. The distribution of doctors is a problem. Much has been done by medical organizations to solve it. Placement services are now in existence in thirty-seven states. Of these, thirty-two are operated by medical societies. It is important to the future of medicine that every community have access to a physician. Medicine must actively aid those communities which are trying to attract doctors.

"2. Over 600 of our county medical societies now have twenty-four-hour emergency call services. I urge all others to support such a system.

"3. Every medical society must have a strong and fearless mediation committee to hear patients' complaints. These must not be whitewash committees. They must be true to the purpose of their founding by reprimanding and disciplining physicians found guilty of exploiting their patients. Only in this way can public confidence in medicine be maintained.

"4. Physician and hospital relationships must be clarified and steps taken toward mutual co-operation. I advise the formation of physician-hospital committees by state and county medical societies to work toward better relations in local communities. This has already been done with some success in some states.

"5. Every county society should become an active unit in the nation-wide effort to develop and expand voluntary health insurance. We must find ways of providing protection against catastrophic illness and coverage of older age groups.

"6. Too many physicians have been isolationists within their communities. Local societies should encourage each individual member to participate in some civic undertaking. We physicians should be rendering health leadership in all service clubs, fraternal organizations, parent-teacher groups, church associations and unions.

"7. Every doctor must be brought to realize that good public relations begins in his or her office —that the way in which they treat patients reflects for good or ill on the entire profession. Medical societies are frequently hampered in their efforts to build public understanding by the doctor who overcharges, the doctor who rudely refuses to answer a night call no matter how urgent, or the doctor who keeps patients waiting for hours in his reception room without any explanation.

"8. There are some newspaper and radio people who honestly believe some of the untruthful charges which have been made against medicine. All county and state societies should make continued efforts to develop a close association with writers for press, radio and television.

"9. There is a need for unity within the profession. I have noticed a distressing regression toward petty internal wrangling, charges and counter-charges, and divisive activities by various groups within the profession."—*AMA Secretary's Letter.*

STUDENTS AMERICAN MEDICAL ASSOCIATION

The following comments were directed to William Bromme, M.D., Chairman of the Council, after the June 17, 1953, meeting of the Student American Medical Association in Chicago.

"The members of the Wayne delegation have gathered both experience and enjoyment at the convention. Russ Staudacher has manifested a tremendous genius for organization to which the convention stands as a fitting testimonial."—Jack Ryan.

"As a member of the Wayne delegation I am gaining much valuable experience in regard to medical meetings."—Bob Lucas.

"This convention has been a revelation—the unbounding enthusiasm of the delegates, officers and observers, has proven contagious to all. It has afforded us enjoyment, education and enlightenment, and I would like to express my appreciation to everyone connected with the SAMA for the opportunity of attending."—Bernard Kimmel (U. of M.).

"We are enjoying ourselves and benefiting both socially and academically at this convention; academically through the convention deliberations and socially through the cordial hostship of 'Dr.' Burns and others."—Alan D. Dawson (U. of M.).

"The SAMA convention was a valuable and interesting experience, nurtured by the capable assistance of Bill Burns representing the MSMS."—David P. Corbett.

"The SAMA convention has certainly proved a memorable and valuable experience to me as just an observer from Ann Arbor. I'd just like to say 'ditto' to the remarks above and add that we had the pleasure to meet and talk with 'Dr.' Bill Burns and Russ Staudacher, a very pleasant surprise addition to our program. As last man on the

(Continued on Page 832)

1 *to escape pollens*



2 alternatives for the hay fever patient

2 *to relieve symptoms*



Pyribenzamine®
hydrochloride
(tripelennamine hydrochloride Ciba)

Once atop Pike's Peak, your hay fever patient can enjoy freedom from pollens. But for patients who must remain in a high-pollen environment, you can institute this effective therapy: one or two Pyribenzamine tablets, 3 or 4 times daily.

Alone and as an adjunct to desensitization, Pyribenzamine has proved effective in relieving hay fever symptoms, as evidenced by thousands of published case reports. On the basis of this evidence, no other antihistamine combines greater clinical benefit with greater freedom from side effects.

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Department of Mental Health

Charles F. Wagg, Lansing, *Director*

"UNNECESSARY CONFUSION"

Again in recent days the ugly cry has been raised that many mental patients, even thousands are held in this state who are *illegally there,* not in need of confinement, and who have been "dumped" on the state by irresponsible relatives. Such serious and gross misrepresentation of the true facts is tragic.

There is no doubt that the commitment laws in this state are archaic. The total process involved is not only complex but it subjects the sick patient and his relatives to ordeals for which there is no excuse. It is undoubtedly true that a substantial number of the commitment orders contain some technical flaw. At the same time, it does not follow that the patient involved is therefore not properly in the hospital or not in need of the care, treatment and benefits of a hospital program. It does not follow that the judge or the physicians connived and "railroaded" this individual into unjustified confinement. Further, it does not follow that the hospital authorities are keeping the patient in the hospital unnecessarily, or that they are "winking" at their true and honest judgment.

The chances today that a citizen will be "railroaded" into a mental institution and held there are indeed remote. It is difficult to conceive of this being an actuality in Michigan's mental hospitals of today. Such an event would require collusion and connivance of the lowest order on the part of not only one individual but many. The committing judge, the certifying physicians, the hospital superintendent, the hospital staff physicians and other responsible hospital workers would need to be involved, not to mention the family.

It is unfortunate that the basic issues are so misunderstood and so mishandled in certain situations by those who have, at best, a superficial understanding of what is involved.

I have been associated with the Department of Mental Health for sixteen years, and throughout that period I have yet to learn of a valid case where hospital authorities have held a patient in the institution who, in their belief, did not need to be there. The pressure is all in the opposite direction. There are real motivations on the part of hospital authorities in this state to release every patient, who, in their judgment, can leave the hospital, since every day the superintendent and his staff are under pressure to admit patients who are seriously ill and for whom there is no room.

Michigan's commitment procedure needs revision, without question. Many desirable changes can be made without jeopardizing proper constitutional safeguards of individual rights. It has been done in many states. In the meantime, the basic issues should be kept straight. Let us not pile more confusion on top of a complex problem.

Charles F. Wagg

AMA NEWS NOTES

(Continued from Page 830)

ledger here I'd like to add that it was a pleasure to meet your Wayne delegation. It has brought SAMA closer to all of us in Michigan. Good luck and best wishes in your work at Wayne."—Herbert Ware.

"Great meeting to me, lovely place, excellent breakfast. SAMA is still rising."—Frank Shubeck.

"A real pleasure to have breakfast at 6:30 a.m. with Bill Burns and all the swell guys from Ann Arbor and Wayne. We're having a good meeting. Regards." Russ Staudacher.

To WBMD: "I gained the degree of 'doctor' very easily here at a breakfast meeting. These future leaders of organized medicine impress me that it will be in good hands. These kids are enthusiastic and smart. Let's show how these lads appreciate recognition by MSMS. Getting up at 6:30 a.m. for a breakfast (to accommodate the heavy schedule of these hard-working conventioners) is not my idea of FUN at a medical meeting."—Bill Burns.

E. R. SQUIBB & SONS 745 FIFTH AVENUE, NEW YORK 22, NEW YORK

Dear Doctor:

℞

Tolserol Tabs. 0.5 gram

Disp. #100

Sig: One tablet 3 to 5 times a day. Take after meals or with 1/3 glass of milk.

Usually Inadequate

This prescription is typical of many written for Tolserol Tablets*, as seen in a recent prescription survey.

Although some patients will respond to such low dosage, much better results can be obtained by following the recommended dosage: 1 to 3 grams, 3 to 5 times per day.

In accordance with this recommendation, the first dosage schedule for a patient could be:

℞

Tolserol Tabs. 0.5 gram

Disp. #100

~~Sig:~~ Two tablets 3 to 5 times a day. Take after meals or with 1/3 glass of milk.

Better

Complete information on the use of Tolserol in muscle spasm of rheumatic disorders, neurologic disorders, and acute alcoholism is available from your Squibb Professional Service Representative.

Sincerely yours,

L. H. Ashe

L. H. Ashe, Manager
Professional Service Dept.

'TOLSEROL' IS A REGISTERED TRADEMARK

*Squibb 'Mephenesin'

PR REPORT

New Film for M.D. Placement Program

Democracy exemplified in new motion picture film—"A Citizen Participates"—shows how members of a rural community can work together to get a physician. Running time, twenty-seven minutes. Available from Young American Films, Inc., 18 East 41st Street, New York 17, New York.

M.D.'s Give Million to Medical Education

Since January 1, 1953, over one million dollars have been donated to medical education. Breakdown: $800,000 to American Medical Education Foundation (11,000 gifts), $301,426.42 directly to thirty-three of the seventy-nine accredited medical schools (8,217 gifts). 9.9% of nation's doctors of medicine have contributed.

Exhibits Available for County Fairs

MSMS again will exhibit at Michigan State Fair. Same (new) MSMS exhibit, complete with films for projection as part of exhibit, is available to county medical societies and woman's auxiliaries for use at county fairs. AMA also has available exhibits: "Health Today" a popular display showing American people enjoy better health than ever before. Nutrition exhibit points up need for variety of foods in daily diet to maintain sound health. Most exhibits require 10 foot space. Contact MSMS or AMA Bureau of Exhibits, 535 N. Dearborn Street, Chicago, Illinois.

Student AMA Grows

Total number of SAMA Chapters has reached sixty-three out of possible seventy-nine, about 18,000 members. John H. Caskey, Baylor University College of Medicine, is new president. Russell F. Staudacher, formerly on MSMS staff, remains as Executive Secretary. *SAMA Journal* is now on a self-sustaining basis. American Medical Education Foundation recently honored Staudacher, its first Executive Secretary, with testimonial scroll.

It Was a BIG Meeting

AMA's 102nd Annual Session registration totaled 48,980, biggest in history: 17,958 M.D.'s. 24,186 interns, residents, technicians, students, nurses and physicians' guests, 6,836 exhibitors—guests. AMA Clinical Session is to be in St. Louis, December 1-4. Next Annual Session in San Francisco next summer.

AMA President E. J. McCormick, M.D., Of Toledo Says

"Physician placement services exist in thirty-seven states."

"Over 600 county medical societies have twenty-four-hour emergency call services."

"Every medical society must have a strong and fearless mediation committee to hear patients' complaints."

"I advise the formation of Physician-Hospital Committees by state and county medical societies to work toward better relations in local communities."

"Every county society should become an active unit in the nationwide effort to develop and expand voluntary health insurance."

Have You

Read "How Much Should Your Doctor Charge?" in June 18 issue of *Woman's Home Companion?* It's good.

Realized that we are backing into socialized medicine by way of militarism? Howard Buffet, former congressman from Nebraska says, "the financial and medical difficulties arising from the claims of veterans already on the rolls are as nothing to what looms ahead." He points out that the high point in war pension expenditures reaches peak fifty years after the war. AMA House of Delegates in New York opposed extension of free medical care to veterans with non-service-connected disabilities.

Seventy-Five Per Cent of Hospital Patients Have Insurance

So concludes Michigan Hospital Association survey conducted at request of Joseph A. Navarre, Michigan, Commissioner of Insurance. Dollar breakdown of hospital cost: 61.5 per cent—salaries; 14.5 per cent—supplies; 9.3 per cent—food; 14.7 per cent—other costs. Biggest cause of 48.4 per cent increased hospital cost—higher salaries for employes (57.7 per cent increase). Compared to business and industry, salaries are still low.

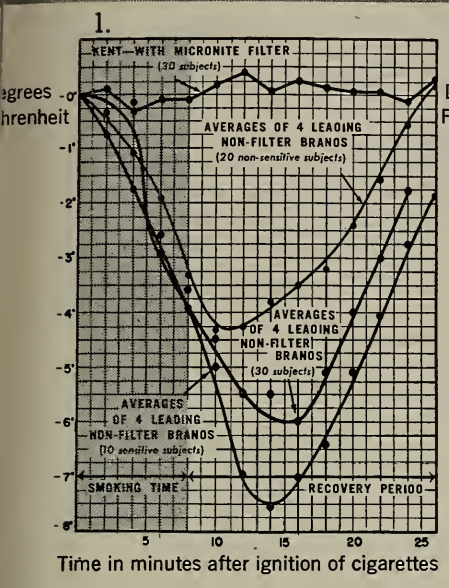
Almont Turns Out for D. H. Burley, M.D.

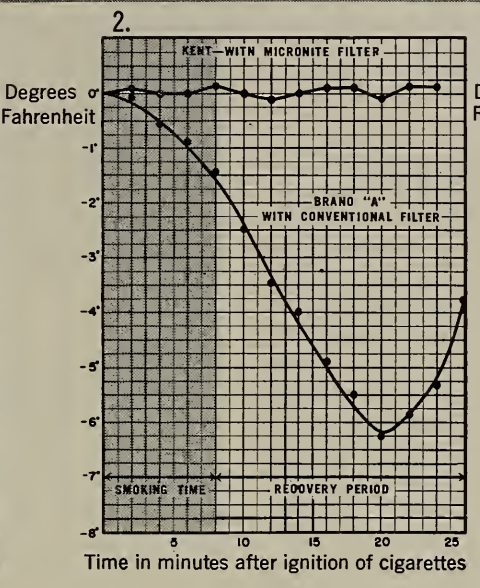
"Dr. Burley week" proclaimed by Almont's Mayor, John Kaiser, marked the sixtieth anniversary of Dr. Burley's service in Almont, Michigan. Nearing ninety, Dr. Burley is still working his usual shift—8:00 a.m. to 9:00 p.m. Almont's gift to Dr. Burley—a fund to establish a new fifty-bed hospital to be named after him.

TV

WTAC-TV in Flint will probably be Michigan's first UHF Television Station. Will open sometime this summer or fall. UHF (Ultra High Frequency) designates a large new group of TV Channels approved for commercial and educational telecasting; adds 70 new channels to the 12 channels previously used; brings television to 1,275 more cities. *Makes television a must in any PR program* if using statewide *or nation-wide communication media. That means films* will be in insatiable demand. *MSMS is leading the state medical field in production of health films.*

ignificant development





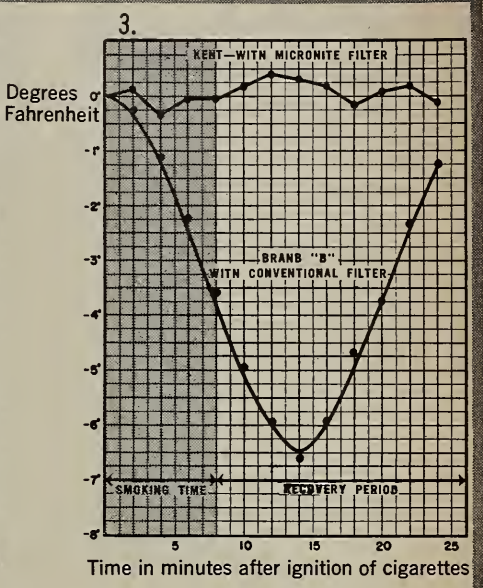
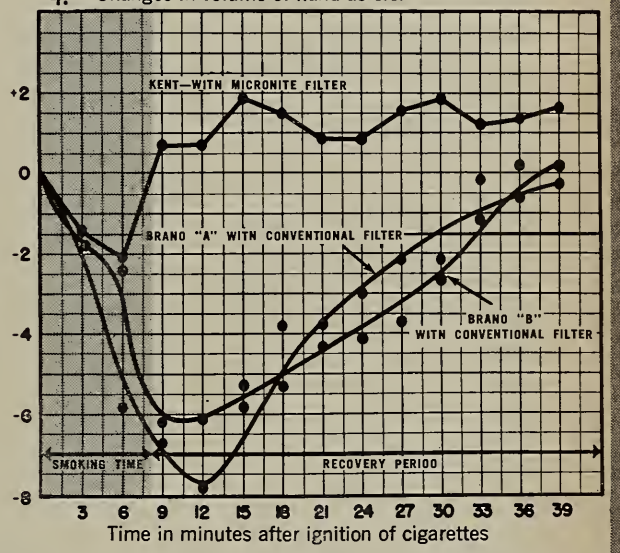


CHART 1. Comparison of KENT with leading non-filter brands. Effects on Peripheral Vascular System. Drop in surface skin temperature at the last phalanx induced by smoking one cigarette.

CHART 2. Comparison of KENT with Brand "A" conventional filter tip. Effects on Peripheral Vascular System. Drop in surface skin temperature at last phalanx induced by smoking one cigarette. Average for 15 susceptible subjects.

CHART 3. Comparison of KENT with Brand "B" conventional filter tip. Effects on Peripheral Vascular System. Drop in surface skin temperature at the last phalanx induced by smoking one cigarette. Average for 15 susceptible subjects.

CHART 4. Comparison of KENT with Brand "A" and "B" conventional filter tip. Peripheral vasoconstriction induced by smoking one cigarette. Peripheral blood flow as measured by continuous plethysmography on the hand. Average for 4 susceptible and 8 non-susceptible subjects.



than unfiltered smoke.

When the scientific evidence of the effectiveness of the Micronite Filter is compared *with* the effectiveness of other filters, *it shows that*—

The problem of smoker susceptibility to tobacco irritants may be largely overcome by KENTs. And for those people whose smoking should be restricted for therapeutic reasons, *KENTs should be considered* as the cigarette of choice.

References Cited

a. *A Manual of Pharmacology*, 7th edition, Philadelphia, W. B. Saunders Co., 1949, pp. 341-352.
b. *J.A.M.A.*, Vol. 103, 1934, p. 318.
c. *J.A.M.A.*, Vol. 135, 1947, p. 417.
d. *J.A.M.A.*, Vol. 104, 1935, p. 1963.



*PATENT APPLIED FOR

Editorial Comment

POST DOCTORAL EDUCATION IN THE PRIVATE HOSPITALS

We are pleased that the recent session of the American Medical Association House of Delegates upheld the decision of its Council on Medical Education and Hospitals in reference to post doctoral education in hospitals, to wit: The education of the intern and by inference, the resident. The one change directed by the delegates was the removal of the so-called two-thirds rule, wherein any hospital failing to meet two-thirds of its requested intern quota for two consecutive years automatically would have lost its intern accreditation. The change is a minor one since hospitals with poor programs, University and private alike, will eventually reach that end anyway.

The first obligation of a hospital is to the patient and most hospitals are founded on that philosophy. If that be true, and we believe it is, then training of young doctors in hospitals becomes a serious staff obligation. And, the end product of our training must reflect our effort by sending increasingly better doctors into the community. Thus can we continue to fulfill our obligation to the patient. The Essentials of an Approved Internship published by the Council clearly spells out the method that will accomplish that end.

We are in the thick of a great transition period in medicine. Medical education has effected orderly changes in its curriculum to keep apace. Post doctoral education in private hositals shackled by tradition and the failure of hospital staffs to keep abreast of medical curricula has been off pace. The old concept that the house officer is being educated when in reality he is the handmaiden of the attending physician or when he functions as an employe of the hospital has contributed greatly to our failure. And, to cover our inadequacy we have hidden behind the cliche "spoon feeding." Education is a matter of the teacher imparting information and knowledge that is relevant to the subject being taught.

A great deal of resistance to the methods and principles outlined by the Council on Medical Education has developed—when Blue Shield and Blue Cross, among other things, was first proposed it also met with a great deal of resistance.

We do not agree with those who contend that a good educational program cannot be accomplished in private hospitals. Neither do we share the fear that the University Hospitals have been given an advantage over private hospitals small or large. Today, unlike thirty years ago, every good hospital has on its staff men with teaching experience. Many of them still hold part time faculty appointments; many were faculty members before entering private practice. And they possess a specific kind of know how about the total care of the patient as seen in practice.

The best programs for those wishing to do private practice should come from those actually doing private practice and it will come if the private hospitals honestly adhere to standards such as are outlined by the Council on Medical Education.—FRANK A. WEISER in *Detroit Medical News,* June 29, 1953.

BLUE CROSS-BLUE SHIELD NON-GROUP ENROLLMENT

Blue Cross and Blue Shield will hold a state-wide non-group enrollment campaign in Michigan during September. Any resident under sixty-five will be able to enroll. Only condition is that married persons must enroll spouse and unmarried children under nineteen years of age. The spouse can be over sixty-five.

The special program is designed to make Blue Cross-Blue Shield protection available to the tens of thousands of Michigan people who cannot join through regular employe, farm or professional groups.

Michigan doctors hold the keys to the success of this year's non-group enrollment campaign, Dr. Robert L. Novy, president of Michigan Medical Service, declared in a special statement.

"The success of this plan lies with the doctors of Michigan," said Dr. Novy. "The plan will get wide publicity and will be backed with advertising. But we have found in the past that enrollment hinges upon the co-operation of the physicians. In areas where doctors co-operate enrollment is higher."

"In the two previous non-group enrollment programs the physicians have played a big part," Dr. Novy continued. "The bulk of inquiries came from cards obtained at doctors' offices or hospitals. That is why Michigan physicians have a key role."

He pointed out that if every physician in Michigan obtained only ten non-group applicants, almost 100,000 people, including dependents, would be added to Blue Cross-Blue Shield membership this fall.

Enrollment is by mail. No physical examination or health statement is required.

Even chronic and pre-existing conditions will be covered after the coverage has been in effect six months. Only other waiting periods are nine months for maternity benefits and six months in the case of removal of tonsils and adenoids for children.

All other conditions are covered the date the contract becomes effective.

Those who wish to enroll should mail in a special "inquiry" card available in hospitals, doctors' offices and in the form of a coupon in newspaper advertisements.

Blue Cross-Blue Shield will return an application card and complete instructions together with a folder explaining the rates and benefits of the program in detail.

To be eligible, the request for the application must be made on or before the September 26 deadline.

The JOURNAL

of the Michigan State Medical Society

Issued Monthly Under the Direction of the Council

VOLUME 52 AUGUST, 1953 NUMBER 8

The Venereal Diseases—A Vanishing Problem?

By John A. Cowan, M.D., M.S.P.H.
William D. Shaw, B.S.
Lansing, Michigan

"AS A DANGER to the public health, as a peril to the family, as a menace to the vitality, health and physical progress of the race, the venereal diseases are justly regarded as the greatest of modern plagues and their prophylaxis the most stressing problem of preventive medicine. They are a prime cause of physical and mental disability and reduced economic efficiency."[5]

Although this statement made by an outstanding authority in preventive medicine in 1935 may be subject to considerable revision today, nevertheless a review of the progress made in venereal disease control in Michigan will show that in addition to major accomplishments there remains a real problem that makes this subject one of current as well as historical interest. It will show also the increasing importance of the role of the private physician in the venereal disease control program.

The incidence of syphilis is related to several factors: the number of infectious cases in the population, the degree and extent of sexual promiscuity, the relatively high rate of communicability, mass shifts in population such as those caused by defense mobilization, the availability of treatment resources, and the amount of public information.

Early diagnosis and treatment, chemical and mechanical prophylaxis, prophylactic treatment, intensive case finding and public education militate toward its reduction.

All those concerned with venereal disease control have cause to feel a real sense of satisfaction in the results accomplished in recent years with respect to the reduction in reported syphilis incidence. In spite of mobilization, venereal disease rates have declined consistently since the end of World War II. Lest we begin to feel too confident and become complacent we must now look to where we stand in the control of the venereal diseases and what needs are to be considered for the future.

We have made real progress since 1941. Table I[1] shows the decline of reported syphilis and gonorrhea in Michigan for the calendar years 1941-1952. Particular note should be made of the rapid decline in early syphilis. The decline in late and late latent has not been so marked. The decrease in congenital syphilis is in a category in which we can all feel a surge of pride. Of a total of 255 cases of congenital syphilis only thirteen cases under one year of age were reported in the calendar year 1951. Reported gonorrhea has continued to decline at a rate of 5 to 10 per cent a year since the peak year of 1946.

In 1952 we experienced the first increase in reported syphilis since the year 1947. A total of 7,377 cases of syphilis was reported, a thirteen per cent increase over the 1951 report of 6,532 cases. The breakdown by stage is shown in Table I.[1]

Although the results of past efforts in bringing about a decline of early syphilis are most gratifying and are good indications as to success of the control program, the best evaluation is provided by data showing the decrease in disability and mortality due to syphilis (Table II).[3]

Our success has been gratifying but we must face the fact that we have problems before us.

Dr. Cowan is Director, Division of Tuberculosis and Venereal Disease Control, Michigan Department of Health, Lansing, Michigan.

Mr. Shaw is Health Program Representative, U. S. Public Health Service, Assigned to the Michigan Department of Health, Lansing, Michigan.

TABLE I.[1] CASES OF VENEREAL DISEASE REPORTED IN MICHIGAN AND RATES PER 100,000 POPULATION BY DISEASE AND STAGE, CALENDAR YEARS 1941-1951

Calendar Year	Population	SYPHILIS						GONORRHEA
		Total Cases	Primary & Secondary	Early Latent	Late and Late Latent	Congenital	Not Stated	
1941	5,437,546	11,370	1,527	1,696	5,357	491	2,299	8,767
1942	5,538,857	12,461	1,731	2,226	5,567	572	2,365	8,753
1943	5,377,329	15,933	2,225	3,979	7,030	424	2,275	9,526
1944	5,377,329	17,288	2,810	4,880	6,901	448	2,249	11,987
1945	5,435,092	16,046	3,357	4,492	5,896	369	1,932	12,565
1946	5,708,415	18,051	4,553	4,369	6,292	458	2,379	12,527
1947	6,069,000	15,276	3,144	3,668	6,119	502	1,843	10,989
1948	6,195,000	12,100	2,084	2,578	5,440	477	1,521	9,448
1949	6,352,000	8,740	1,176	1,955	4,456	368	785	9,427
1950	6,371,766	8,830	604	2,023	4,612	288	1,303	8,678
1951	6,545,000	6,532	430	1,406	2,937	255	1,504	8,494
1952*		7,377	294	1,417	3,860	239	1,567	7,691
		Rates per 100,000 Population						
1941	5,437,546	209	28	31	98	9	42	161
1942	5,538,857	224	31	40	100	10	42	158
1943	5,377,329	296	41	74	130	7	42	177
1944	5,377,329	321	52	90	128	8	41	222
1945	5,435,092	295	61	82	108	6	35	231
1946	5,708,415	316	79	76	110	8	41	219
1947	6,069,000	251	51	60	100	8	30	181
1948	6,195,000	195	33	41	87	7	24	152
1949	6,352,000	137	18	30	70	5	12	148
1950	6,371,766	138	9	31	72	4	20	136
1951	6,545,000	99	6	21	44	3	22	129
1952*		112	4	21	58	3	23	117

*1952 rates based on 1951 population

TABLE II.[3] MORTALITY, INFANT MORTALITY, AND FIRST ADMISSIONS TO STATE MENTAL HOSPITALS IN MICHIGAN, DUE TO SYPHILIS, 1939-1949 CALENDAR YEARS (1950-52 FISCAL YEARS)

Calendar Year	Mortality Due To Syphilis* (Sixth Rev.)	Infant Mortality Due to Syphilis per 1,000 Live Births	First Admissions to State Mental Hospitals with Psychoses Due to Syphilis*
1939	9.7	.23	5.6
1940	8.5	.16	4.9
1941	7.7	.13	5.6
1942	8.2	.08	5.1
1943	8.1	.08	4.9
1944	7.3	.17	4.8
1945	7.2	.22	5.1
1946	7.0	.11	4.4
1947	6.1	.07	3.2
1948	6.0	.08	3.1
1949	6.2	.06	2.6
1950**	5.1	.012	1.8
1951**	4.6	.006	1.6
1952**	2.6	.011	1.3

*Rates per 100,000.
**Fiscal Years.

A major concern is the sense of false security our successful efforts seem to have inspired among both the medical and lay public. There are presently no immunizing agents for syphilis or gonorrhea nor do we see evidences of any new social or moral trends which will eliminate opportunities for spread of these diseases. In the United States and Michigan the venereal diseases still are major public health problems as evidenced by the number of reported cases. In the year 1951 gonorrhea was fourth and syphilis sixth in the reportable communicable disease list for Michigan. Together the two diseases total more cases than all other reported communicable diseases of adults combined. This number of reported cases must be considered the *minimum* incidence of both diseases.

In 1941 the private physicians reported 55 per cent of the known syphilis in Michigan, in 1952, 54 per cent. Forty-seven per cent of the total gonorrhea reports in 1941 were received from private physicians but this dropped to 22 per cent in 1952. Many studies under controlled conditions in the military services have shown the prevalence of gonorrhea to be four to eight times as great as that of syphilis yet private physicians report more than twice as many cases of syphilis as of gonorrhea.

A review of the applications for special dispensation medical certificates for marriage as required by the Michigan Premarital Examination Law shows that for the period 1948-1952, 25.4 per cent to 27.3 per cent of the positive applicants had not been previously reported. Twenty-three per cent of the syphilis morbidity reports received from private physicians are obtained only after initiating special efforts consisting of a letter, phone call, or personal visit. In the fiscal year 1952, 4,095 suspect epidemiological reports on positive blood specimens submitted by private physicians to the state laboratories were followed. Eighteen per cent, or 727 cases, were diagnosed and reported by physicians as infected. Even after special effort, we were unable to obtain a disposition on 22 per cent of the 4,095, or a total

of 876. If we assume that the percentage infected (18 per cent) is the same in the 876 not reported as in the total, it can be seen that at least 157 cases were probably lost in the fiscal year 1952 by failure of the private physician to report or follow-up the positive serologic reports. Since many of the private laboratories do not report their positive findings it was not possible to make similar estimates for that group. It is possible that a similarly large group of suspected cases were lost in this group.

Is the decline in the reported incidence of the venereal diseases real or just apparent? A real decline can be proven only by an equal or greater number of diagnostic observations which result in a smaller number of positive diagnosed cases. On the basis of data from public venereal disease clinics in Michigan there is considerable evidence of a real decline in syphilis, since the diagnostic examinations for syphilis have increased two-fold, whereas the percentage found infected has decreased two-thirds. The data for clinics does not give supporting evidence of a real decline for gonorrhea. Of course, we have no way of ascertaining the total number of diagnostic examinations made by private physicians.

Just why is there a need for better reporting of the venereal diseases? There are four reasons why the reporting of any communicable disease is important: (1) It shows where, when and under what conditions the disease is occurring; (2) it makes possible the prevention of minor epidemics by controlling the source and spread contacts; (3) It makes possible the evaluation of progress in control programs; (4) It makes possible the analysis of morbidity and mortality in the venereal diseases and the study of some of the social and economic factors involved.

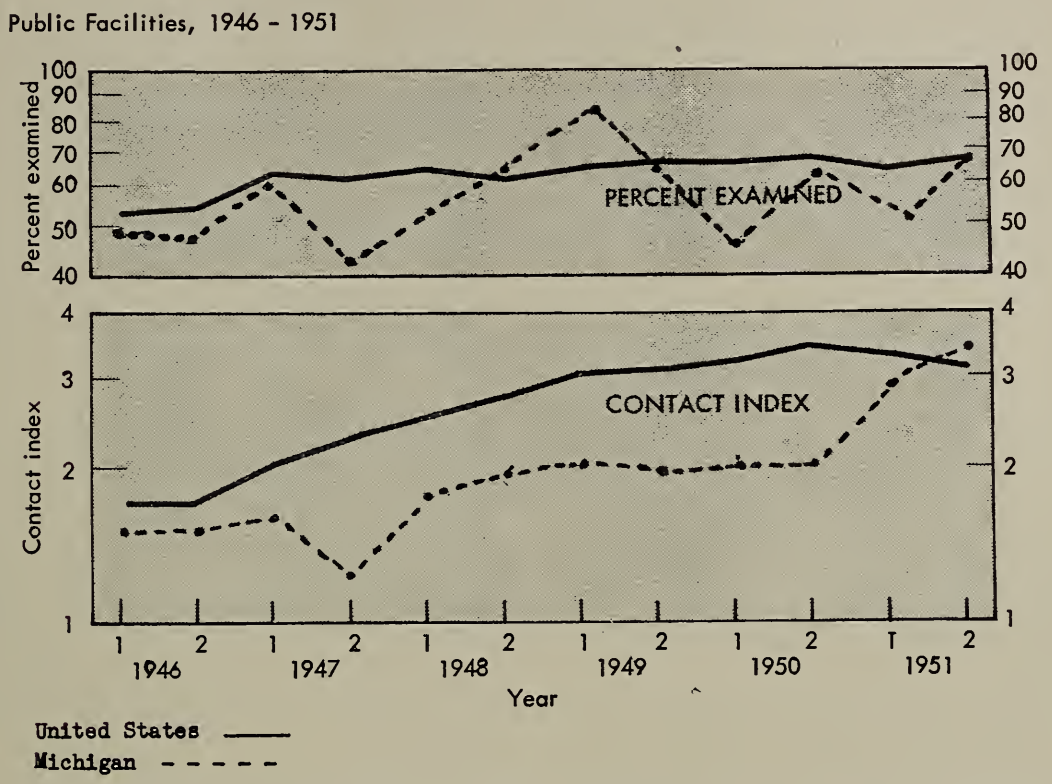


Fig. 1. Contact index and percent of contacts examined based on previously untreated primary and secondary syphilis.

What are the future needs in the control of venereal diseases? There are two major responsibilities. 1. The control of the spread of the disease; and 2. The prevention of late sequelae or catastrophic results of untreated syphilis. What steps can be continued and improved in order that these responsibilities may be fulfilled?

Over the years a method of early case finding has been developed and refined. The method, known as contact interviewing and investigation is

performed by persons skilled in the new techniques of interviewing and contact investigation. Patients with early syphilis and gonorrhea are interviewed to obtain names, addresses and other identifying data of all their sex partners. Investigators use this information to find and bring to examination each of the contacts named or identified during the interview. Those contacts found infected are treated, and in turn, interviewed, continuing the epidemiologic process.

Indices have been developed to measure the effectiveness of contact interviewing and investigation. Figure 1[6] presents the national and Michigan trend of these indices from January 1946 through June 1952. These data refer to public clinic cases only. There is insufficient data to make any analysis of the number of contacts obtained per case by private physician. In Michigan approximately 5 per cent of the private physicians who report venereal disease, interview for contacts and encourage in various ways the diagnosis and treatment of these contacts. Private physicians are busy and interviewing for contacts is an arduous task. Where the physician feels that he cannot undertake such activity, he may take advantage of the expert and confidential interviewing and investigation service of his local or state health department. This service is used in many areas of Michigan by physicians. For every venereal infection found by the private physician, just as in the clinic, there are one or more infected contacts who should be under treatment. The venereal diseases can never be controlled without the continued assistance of the practicing physicians. The basic case finding device is contact-interviewing and investigation.

Although there are encouraging results from the control program as measured by the significant decreases in mortality and disability due to syphilis, we must continue to ferret out cases of late and late latent syphilis from the population to decrease the warehouse or reservoir. Herein lies the nucleus of our syphilitic cripples of tomorrow—the cardiovascular and central nervous system luetics and the syphilitic blind.

Even today after a marked downward trend the cost of uncontrolled syphilis is phenomenal. It is estimated that there is a reservoir of 2,100,000 cases of undiscovered late and late latent syphilis in the United States which must be found and brought to treatment.[6] It is estimated that there are 5,770 cases of undiscovered late and late latent syphilis in Michigan.[1] Bruusgaard's study demonstrated that late manifestations in untreated late syphilis would develop in about 12 per cent of the cases, 4 per cent central nervous system and 8 per cent cardiovascular. On the basis of these data it is estimated that unless the reservoir in the United States is found and treated, 250,000 cases of late manifestations would develop and in Michigan at least 680 cases, 220 central nervous system and 460 cardiovascular.[1] The minimum cost for maintaining the 1,392 patients with psychoses due to syphilis in mental hospitals in Michigan is estimated to be $6,264,000, and for the eighty-five patients with psychoses due to syphilis who were admitted to mental hospitals in Michigan during the fiscal year 1952 it is estimated to be $382,500. These estimates are based on a four and one-half-year patient stay at $1,000 per year cost to taxpayers, for all patients.[3] The patient stay in Michigan mental institutions for paretics and others with syphilitic psychoses is not known but the average stay nationally is ten years.[6] On the basis of the Michigan data of minimum cost the estimated cost of maintaining the 220 cases of central nervous system syphilis resulting from Michigan's reservoir of untreated late syphilis would approximate $990,000.

Freeble and Donahue[2] have made a survey and found that in the ten-year period ending December 31, 1948, syphilis ranked first among all causes of blindness. Among the cases in which definite etiology could be specified, syphilis was responsible in 20.9 per cent. The maintenance of the syphilitic blind in the United States for 1949 was estimated to cost $18,750,000.

Summary

The decline in the reported incidence of syphilis has been one of the most dramatic episodes in modern epidemiology. Primary and secondary syphilis in Michigan, on the basis of reports, declined from a peak rate of seventy-nine per 100,000 (1946) to four per 100,000 (1952). Total syphilis cases declined from a peak of 321 per 100,000 (1944) to 112 per 100,000 (1952). Gonorrhea reporting is probably much more incomplete than syphilis. On the basis of the available data the apparent reduction in the reported gonorrhea in-

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The Epidemiology of Venereal Diseases

By Edgar B. Johnwick, M.D.
Hot Springs, Arkansas

BETWEEN 1900 and 1910, some fundamental discoveries provided new methods with which to make the diagnosis of syphilis and also provided the medication with which to treat cases of this disease. Since then, major advances have been made in therapy of syphilis and in the publicity given to the disease and to control methods. There have been some advances in techniques for the diagnosis of syphilis, but these have been refinements of older methods rather than new discoveries. Applying this knowledge to large numbers of persons for a long period of time, we have apparently brought about a considerable reduction in the incidence of syphilis. The incidence of gonorrhea has been reduced much more slowly. Now we are faced with the responsibility of eradicating these two diseases altogether.

The matter I want to discuss today deals not with our past successes but with our failures. I believe there is evidence to show that we have made errors of omission in the venereal disease control program. I hope I won't stretch your imagination or your patience to the breaking point by presenting a mixture of fact and fancy that seems plausible to me.

A great deal was known about the diagnosis of gonorrhea in the male fifty years ago. Not much has been added since then. It is almost as difficult today to make the diagnosis of gonorrhea in women as it was in 1925 or even in 1900. To point up this difficulty, I would like to phrase some questions. We will need answers to them before gonorrhea can be brought under control:

1. What are the clinical and laboratory characteristics of a woman who has recently infected one or more men with acute gonococcal urethritis?

2. How long and with what tests should such a woman be followed to determine that she is not infectious?

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Figures presented herein have been "rounded-off" for the purpose of easier presentation of the talk.

TABLE I. RESULTS OF INTERVIEWS OF PATIENTS WITH ACUTE VENEREAL DISEASE SEEN IN HOT SPRINGS; CONTACTS NAMED FOR A SIX-MONTH PERIOD PRECEDING INTERVIEW

Race	Sex	No. Patients Interviewed	No. Contacts Named	Index
N	F	54	346	6.4
N	M	52	307	5.9
W	F	13	37	2.8
W	M	21	58	2.8

3. When can the epidemiologist "close out" the case of a woman who has purportedly infected a man with gonorrhea, but is found to be uninfected at the time of examination?

I would like to present some arguments that may be useful in helping us reduce the problem of gonorrhea and syphilis simultaneously. I will need to make some assumptions to support my reasoning:

The first assumption is that syphilis and gonorrhea are an epidemiologic entity. The acquisition of either disease needs to be preceded by an identical behavior pattern. Although gonorrhea and syphilis differ clinically and etiologically, they cannot be separated epidemiologically.

The second assumption is that most women or men who have venereal diseases are equally promiscuous. We can support this by contact indices from Hot Springs (Table I). Within each race, the sexes appear to be equally indiscriminate in their choice of numbers of sex partners, and it seems that Negroes (in Arkansas) have twice as many sex partners in a half-year period as whites do. The greater promiscuity of these Negroes may account for the higher venereal disease rates in the Arkansas Negro population, and the higher rate, in turn, will be perpetuated on account of this greater promiscuity.

The third assumption is that no person who acquires either syphilis or gonorrhea knows beforehand which of the two he will acquire. To look at this assumption more broadly, one has to recognize that promiscuous exposure to indiscriminately chosen multiple sex partners has four possible aftermaths: (1) no disease, (2) infection with gonorrhea, (3) infection with syphilis, (4) simultaneous infection with gonorrhea and syphilis.

I believe that the four aftermaths of indiscriminate sex exposure appear with greatest frequency in the order given. I may suppose that a person

TABLE II. AGE DISTRIBUTION OF 982 CONSECUTIVELY ADMITTED WHITE AND NEGRO MEN AND WOMEN WITH ACUTE SYPHILIS (DARKFIELD POSITIVE) TO HOT SPRINGS MEDICAL CENTER

Age*	Number	Per Cent
Under 15	18	1.8
15-19	298	30.3
20-24	360	36.8
25-29	188	19.1
30-34	69	7.0
35-39	29	3.0
40 and over	20	2.0
Total	982	100.0

*15-39 years: 96.2 per cent.

TABLE III. CASES OF ACUTE VENEREAL DISEASE REPORTED IN CONTINENTAL U. S.—1952 (NEAREST 1,000)

Disease	Men	Women	Both
Acute Syphilis	7,000	5,000	12,000
Gonorrhea	167,000	78,000	245,000
Both	174,000	83,000	257,000

Source: Public Health Service Statistical Letter No. 35.

TABLE IV. CASES OF VENEREAL DISEASE REPORTED IN CONTINENTAL U. S.—1952 (NEAREST 1,000)

Disease	Men	Women
Acute Syphilis	7,000	5,000
Chronic Syphilis	70,000	70,000
Gonorrhea	167,000	78,000

Public Health Service Statistical Letter No. 35.

TABLE V. COMPARISON OF TOTAL CASES OF EARLY, LATE LATENT AND LATE SYPHILIS REPORTED IN THE CONTINENTAL U. S.—(NEAREST 1,000)

Year	Men	Ratio	Women
1948	102,000	1:1.2	120,000
1949	97,000	1:1.1	110,000
1950	84,000	1:1.1	94,000
1951	80,000	1:1	80,000
1952	70,000	1:1	70,000

Public Health Service Statistical Letters.

who decides to be promiscuous is first of all uninfected, and will eventually acquire gonorrhea, perhaps one or more times, and then syphilis, simply because the former is so much more prevalent among his associates than syphilis is. This last assumption I cannot prove because we have not managed enough gonorrhea patients in Hot Springs to present a record of the age at which gonorrhea is first acquired. We do have some data to show that people with syphilis have often had antecedent infections with gonorrhea.

The fourth assumption is that a person who decides to be promiscuous exposes himself to a risk from syphilis or gonorrhea which can be expressed as a ratio of the contemporary reported incidence of the two diseases. As the ratio changes, the relative risk of infection changes, and there is evidence to show that gonorrhea is rapidly rising in importance as a venereal disease problem.

The fifth assumption is that all late venereal disease must be preceded by acute venereal disease, and that almost all acute venereal disease is transmitted in the age group fifteen to forty, which is also the normal age for procreation. Table II shows the age distribution of 982 consecutive cases of darkfield positive syphilis seen in the Medical Center in Hot Springs. In comparison, we may note that 97.6 per cent of all women bearing living children in 1949 were between fifteen and forty years of age.

With these assumptions in mind, I would like to review the most recent venereal disease reports. Table III shows the reported cases of acute syphilis and gonorrhea in the United States in 1952. I think these figures are incorrect and misleading. If it is reasonable to assume that all latent and late syphilis comes from acute syphilis, and that the disease is equally transmissible from man to woman or from woman to man, then we could expect an equal number of either acute or chronic syphilis infections to be seen in both sexes at any time. However, there are anatomic differences that make the diagnosis of either acute syphilis or of gonorrhea more difficult in a woman than in a man.

Suppose we were to look for a stage of syphilis that is manifested the same way in men and in women. Early latent, late latent, and late syphilis (chronic syphilis) is found by the same techniques in either men or women, and Table IV shows that the same number of cases of chronic syphilis was indeed reported in men and women in 1952. Now, if it is possible to find more men with acute syphilis in any year, then we would expect them to be treated and to be lost to subsequent case finding programs that depend on serologic testing, especially when such programs are first started. Is there evidence for this? Table V may show that evidence. Proportionately, more women than men were found to have chronic syphilis in 1948 than now. It is possible that early mass serologic

surveys found large numbers of women with latent syphilis who had been previously undiscovered, and that these cases, after having been removed from reporting incidence subsequently, permittted the annual discovery rates in men and women to approximate 1:1 as they have done during the past two years. If men and women infect each other in equal numbers each year, one would expect the ratio of chronic syphilis cases between the two sexes to be about 1:1.

We may reason, then, that the 5,000 female cases of acute syphilis reported in 1952 represent only about three-fourths of the actual number of women infected during 1952 with acute syphilis. (Table III) I realize that the 7,000 men reported with acute syphilis do not represent the total number of men so infected, and I think it is conservative to make the assumption that there were *at least* 7,000 women infected with syphilis, of whom only 5,000 were discovered and reported to be so infected during 1952. The undiscovered 2,000 women probably continued to infect their sex partners and their offspring during that year and the following, since the period of infectiousness of untreated acute syphilis is about two years.

Now let me consider the reported incidence of gonorrhea among men and women. I have no way of estimating how many more cases of gonorrhea actually occurred among men in 1952 than the 167,000 cases reported. Suffice it to say that in 1952, 167,000 cases of gonorrhea in men were seen in the offices of physicians who saw fit to report them. Was there actually an equal number of gonorrhea cases among the women consorts of these men in 1952? I think it is very likely that there was a minimum equal number of cases among women. However, only 78,000 were reported in 1952, so 89,000 women must have been missed in 1952. That is a very large number to have been missed, but being roughly half of that of the cases reported in men, it isn't so large in proportion. It may imply several things, singly or in combination:

1. Gonorrhea may be more easily transmitted from women to men than from men to women. I think this idea is rather unlikely but there is no proof for or against it.

2. The signs of gonorrhea in men are classic, and usually interpreted correctly by the patient before he comes to the doctor's office, whereas the signs of gonorrhea in women are obscure to the patient.

3. The diagnosis of gonorrhea in men can be made correctly most of the time on the first attempt. However, diagnosis of gonorrhea in a woman who is almost certainly known to harbor living gonococci, because of available evidence of having transmitted the acute disease to a man in the recent past, is not at all easy to make. Even with good laboratory techniques, only about one-third of such cases yield positive reports when only one examination is performed.

TABLE VI. RATIO OF CASES OF GONORRHEA REPORTED IN MEN AND WOMEN YEARLY IN CONTINENTAL UNITED STATES—(NEAREST 1,000)

Year	Women	Ratio	Men
1948	109,000	1:2.3	254,000
1949	98,000	1:2.4	234,000
1950	89,000	1:2.4	215,000
1951	78,000	1:2.5	193,000
1952	78,000	1:2.1	167,000

Public Health Service Statistical Letters.

How then, must we interpret this low number of cases of gonorrhea reported among women in 1952? I think the low number appears because a large number of women infected with gonorrhea do not suspect that this infection is present. I also believe that an unknown number of those women who did have signs and symptoms in 1952 that were due to an infection with a gonococcus, presented a syndrome to their physicians which the physicians were unable to interpret properly. I think those two reasons are adequate to explain why only one-half of the minimum number of women with gonorrhea appeared on reports during fiscal year 1952.

If one-half of the possible cases of gonorrhea in women were missed in 1952 because of anatomic differences, then it must follow that the same error must have appeared in previous years. Neither the anatomy of women nor the clinical nature of gonorrhea have undergone recent changes, nor have new diagnostic techniques been developed for detecting infectious gonorrhea in women. Table VI shows that the ratio of gonorrhea reported in the United States in men and women has remained almost constant from 1948 through 1952. I think this is fairly good evidence to show that the same error in case finding has been made for the same reasons year after year.

Our inability, even with our best intentions and our most modern equipment, to detect infectious

TABLE VII. RATIOS OF ACUTE SYPHILIS TO GONORRHEA REPORTED IN THE CONTINENTAL UNITED STATES (NEAREST 1,000)

Year	Syphilis	Ratio	Gonorrhea
1947	107,000	1:3.8	401,000
1948	81,000	1:4.5	363,000
1949	54,000	1:6.1	332,000
1950	32,000	1:9.5	304,000
1951	18,000	1:15.0	270,000
1952	12,000	1:20.4	245,000

Public Health Service Statistical Letters.

TABLE VIII. ESTIMATED NUMBER OF CASES OF ACUTE VENEREAL DISEASE IN WOMEN MISSED IN CONTINENTAL U. S. (EXCESS IN NUMBERS OF CASES IN MEN OVER CASES IN WOMEN REPORTED):

Year	Syphilis	Gonorrhea
1948	12,100	145,000
1949	5,700	136,000
1950	3,200	126,000
1951	2,300	115,000
1952	2,000	89,000
Total	25,300	700,000

gonorrhea in a woman may be responsible for maintaining within the population a constant reservoir of infectious cases among women. Our main interest in venereal disease control has been focused on the eradication of syphilis. We have made remarkable advances in the control of syphilis as the next table will show. The success in syphilis reduction has not been paralleled by equal success in gonorrhea reduction. (Table VII). This table shows that the ratio of acute syphilis to gonorrhea has changed greatly within six years in the United States. It is pertinent to note that the reported cases of gonorrhea have decreased during the six-year period covered. It is easy to see that the change in ratio is due entirely to the more rapid reduction in the incidence of syphilis. One only needs to review venereal disease control statistics and programs to see how intently activities are focused on the reduction of syphilis through surveys, premarital, prenatal and preemployment examinations, and contact investigation. The language of the contact investigator contains such terms as "lesion to lesion index," and new cases brought to treatment are stars in the contact investigator's crown. Perhaps, the contact investigator whose efforts bring a woman member of venereal disease reservoir to prophylactic treatment, should be given the same credit for this public health accomplishment as he is given when he uncovers a previously unknown infected case in men or women.

I think it is entirely honest to say that in the past and probably in the present, "venereal disease control" has meant *syphilis control.* If one considers the actual incidence of syphilis to gonorrhea as an index of the risk of acquiring these two diseases, it is easy to see from Table VII that the chance for a promiscuous person to acquire gonorrhea has increased considerably between the years 1947 and 1952. This means to me that the relative importance of gonorrhea as a venereal disease problem has increased fivefold since 1947.

Suppose we make a fairly conservative estimate on the basis of the argument I have presented. Suppose we assume that it is true that for every case of acute syphilis in a man there should be a case of acute syphilis in a woman and that the same equality should also hold for the cases of gonorrhea reported in men and women in any one year. Suppose we then calculate the number of cases in women that must have been missed each year from 1948 to 1952. This figure looks formidable (Table VIII). I do not know of any way in which this estimate can be made accurately, and I think that my estimate is conservative. According to the differences in cases of acute venereal disease reported in men and women in this five-year period, we have missed some 25,000 cases of acute syphilis and 700,000 cases of gonorrhea in that time. I am sure that some of the 25,000 cases of syphilis in women have been picked up as early or latent syphilis during the latter part of that five-year period by serologic surveys, premarital examinations, food handlers' examinations, and so on. I would like for someone to tell me what could have possibly happened to the 700,000 unreported women who were infected with acute gonorrhea during this five-year period. I am sure that there is only one rather accurate test that detects their infectiousness.

When we want to culture a fastidious organism, we often inject laboratory animals with human material that may contain pathogenic organisms. Apparently nature has been carrying out an experiment for us and we have been disregarding the positive results. It is valid to assume that a woman who harbors living gonococci and is unaware of it, will eventually reveal her infection by infecting one or more men with a disease which promptly manifests itself with classical signs. Should we overlook this spontaneous presentation

of an infected laboratory animal and disregard the source of his infection? We have no other test animal that can be infected with gonococci from a human female. However, we were confronted in 1952 with 167,000 men who walked into some physician's office announcing that they had gonorrhea.

I think it is interesting to note that the ratio of syphilis to gonorrhea in the total cases missed is approximately 1 to 28. You will also note that in 1952 the ratio was about 1 to 45. Perhaps that is the ratio that will be seen in reported cases in fiscal 1953 or 1954. Is it possible that undiscovered cases in women actually represent the unknown source which keeps a constantly changing supply of new venereal disease cases in our population? We must remember that venereal disease reservoir is constantly changing. New, uninfected volunteers enter it each year and begin acquiring infections to which control officers then allocate priority.

If there are unknown women with gonorrhea at large in the population, and if they continue to practice the habit pattern which allowed them to become infected with the gonococcus, I believe they also stand a chance of acquiring syphilis subsequently. I would like to show you the results of a study made by Marcussen and Keldbeck in Copenhagen. (Table IX). This table bears out the fact that repeated attacks with gonorrhea increase the chance of transmission of syphilis to the persons accumulating this particular experience. In Table IX we can see that of a hundred Danish persons who had acquired gonorrhea once, only 9.6 per cent had acquired syphilis, and that of a hundred who had had gonorrhea three times, 19.1 per cent had had syphilis, and of a hundred who had had gonorrhea four or more times, 44.8 had also acquired syphilis in the meantime. I am sure that no one will argue with me when I say that undoubtedly syphilis was more prevalent in Danes who had had gonorrhea than it was in Danes who had not had gonorrhea. I think the same can be said about any nationality. I believe that the women consorts of men with gonorrhea will have a greater incidence of syphilis annually than women in the population as a whole.

Since it is fashionable to talk about "pin-pointing" in venereal disease control seminars, we could use that term here to good advantage. If we look at Table III again we will see that men contributed the mass of recorded information concerning acute venereal diseases in 1952. According to what is known about contact indices, these 174,000 men could have "pin-pointed" the names of about 500,000 women. Taking out duplicates, triplicates, and quadruplicates and those found infected, would surely reduce that figure considerably. What about those women who are examined as a result of such case finding activities and found uninfected with gonorrhea? Isn't the fact of exposure to a man with known gonorrhea adequate reason for administering prophylactic treatment to such women? How else could the case be closed?

TABLE IX. INCIDENCE OF SYPHILIS IN PATIENTS WITH ONE OR MORE ATTACKS OF GONORREHA (COPENHAGEN)

Number of Gonorrhea Attacks	Number of Patients	Number with Syphilis	Per Cent with Syphilis
1	1,386	133	9.6
2	586	120	20.5
3	173	33	19.1
4	52	16	30.8
over 4	67	30	44.8
All	2,264	332	14.7

From Marcussen & Keldbeck: Repeated infections with Gonorrhea and Syphilis. Acta dermat-venereol., 32:211, 1952.

There are almost 29 million women aged fifteen to forty in the United States. It would not be surprising to find that less than 1 per cent of them constitute the annually changing identifiable venereal disease reservoir. The reservoir is probably not much larger than that. Promiscuity is a quantitative matter. To spread venereal diseases, it is necessary for a person with an infectious venereal disease to have several sex partners within the period of incubation or during that stage of disease when the pathologic process causes no serious discomfort. A woman with untreated syphilis will remain infectious for two years. A woman with untreated gonorrhea will probably remain infectious for a similar period of time, but she may go through episodes during which she is more infectious to her men consorts than at other times. No one knows any facts about the natural history of undetected gonorrhea in women because no one can possibly make any observations on something that is unobservable with present techniques and present equipment.

Summary

1. The venereal disease reservoir exists in a small proportion of the population group aged

(Continued on Page 864)

Problems in the Diagnosis and Treatment of Syphilis

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IT IS NOW well established that the antibiotics provide relatively quick, safe and effective antisyphilitic treatment but, unfortunately, our understanding of syphilis has not kept pace with the great advances in treatment. As a result, numerous problems in diagnosis continue to plague the physician. Before examining some of these problems, it is well that we have clearly in mind some of the highlights of what is known and not known about the infection.

We know very little about the life cycle and strains of the *Trepenoma pallidum* since the organism has not as yet been grown satisfactorily on artificial media. In the human host syphilis actually occurs as two major diseases—the acute and chronic stages which differ clinically and immunologically. The early acute lesions are self-limited and nondestructive; they are highly infectious because of the large number of treponemes that can be demonstrated by darkfield examination. The late lesions, when they occur, are chronic, destructive and always heal with scar tissue.

Clinically, the acute stage ends with the final disappearance of early lesions but immunologically, it ends only when the body tissues have developed a more or less permanently altered reactivity to the treponeme. This altered reactivity marks the beginning of the chronic stage which probably starts in practically all untreated cases within two years after infection. If treatment is given during the acute stage, relapse or reinfection is usually followed by new acute lesions; if given during the chronic stage, reinfection as well as relapse may be possible in some cases but, as a rule, it does not cause acute lesions because the tissues have already entered the immunologic status of the chronic stage.

In the acute stage treponemes are widely distributed in large numbers throughout the body; in the chronic stage, with the exception of general paresis, they are found with great difficulty even in demonstrable foci of infection. The mechanism by which the host keeps the invading organisms so few in number during the chronic stage is unknown nor do we know why only some 30 to 40 per cent of infected individuals develop demonstrable chronic lesions.

Clinically, the acute lesions vary considerably in appearance but they do not vary to the same extent histologically. The characteristic feature of both acute and chronic lesions is granulomatous inflammation except in certain types of late neurosyphilis where we find only degenerative processes. Why such degenerative lesions, unassociated with the usual type of syphilitic inflammation, are found in tabes dorsalis, spastic paraplegia, and primary optic atrophy, is unknown.

The chronic lesions of syphilis can be classified into two main divisions: (1) those that start early in the chronic stage or not at all and (2) the so-called gummatous reactions that may occur at any time during the chronic stage—even thirty or forty years after infection. The former type of lesion occurs chiefly in the central nervous and cardiovascular systems. We know that patients who have normal spinal fluid examinations four years after infection will not subsequently develop neurosyphilis. We also know that histologic evidence of syphilitic aortitis has been noted by pathologists during the early years of the chronic stage in patients who have died from causes other than syphilis. In spite of their early onset during the chronic stage, the late lesions of neurosyphilis and cardiovascular syphilis usually fail to cause symptoms for many years. Gummas, on the other hand, that may develop at any time during the chronic stage, have a relatively explosive onset, producing symptoms, as a rule, soon after the sensitized tissues react to the treponeme.

Successful treatment of the acute stage usually, though by no means always, reverses positive serologic tests for syphilis (STS) to negative within a few months to a year after treatment while no known therapy started during the chronic stage results in seronegativity within ten years in more than 30 to 40 per cent of cases. This latter fact has caused great distress to some patients and accounts for much over-treatment of the disease by physicians who make seronegativity the chief goal of therapy.

Although the foregoing remarks by no means cover all of the phenomena of syphilis, they suf-

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fice to illustrate the fact that syphilis is one of the most complicated diseases known to medicine. Without the aid of laboratory tests, the diagnosis, especially of late syphilis, is extraordinarily difficult. In view of its protean nature and the fact that late signs and symptoms usually fail to develop for years after infection and because of our ignorance of the mechanisms controlling the balance between the host and invading organisms, it is natural that STS came to be the foremost means of diagnosis. These tests are still indispensable but no physician should treat syphilis who is unaware that positive STS are not *necessarily* proof of active syphilis any more than positive tuberculin tests are proof of active tuberculosis. In other words the decision as to whether or not to treat syphilis requires greater diagnostic acumen than merely treating positive "blood tests."

In making this statement I do not have biologic false positive tests primarily in mind. Discussion of this perplexing problem is beyond the scope of this paper except to say that, until we have more practical means of differentiating between true and false positive tests than at present, it is usually safer to treat previously untreated patients who have persistently positive tests of several months' duration than not to treat. Perhaps in time the newly discovered treponemal immobilizing antibody test will make such differentiation possible, but, with its present complicated technique, this test is not available for routine use. Aware, as I am, of the importance of biologic false positive STS to the unfortunate individuals who have them, I think this problem is of minor significance compared to some others. When biologic false positive STS are suspected, a definite diagnosis of syphilis should not be made but patients can be treated with penicillin as a precautionary measure. The important thing is not to keep on treating them merely because of persistently positive STS. The same statement applies to patients treated for actual syphilis, which brings us to the most important practical problem in the management of syphilis, viz., the interpretation of positive STS in treated patients.

Since we know very little about reagin, the globulin factor demonstrated by STS, our interpretation of the tests depends on observations made during the follow-up of patients in past years. What do these observations tell us?

We have learned that during the acute stage reagin begins to be demonstrable in the blood serum between the fourth and eighth week after infection. It increases rapidly in amount until it reaches a peak usually during the secondary stage. Individuals vary greatly in the amount of reagin produced and there is no relationship between the severity of the syphilis and the height of the STS titers. Following good treatment of seropositive primary and secondary syphilis the STS titers fall markedly during the first few months. In the absence of relapse or reinfection, by the end of the sixth month the titers reach low levels with only occasional exceptions, but from 20 to 30 per cent of the patients treated for secondary syphilis can be expected to remain seropostive for more than one year.

Of 694 patients treated at Bellevue Hospital for seropositive primary syphilis with one of nine different schedules of penicillin therapy and followed up for more than one year without retreatment, twenty-four (3.5 per cent) were still seropositive more than one year after treatment. Of 1,620 patients treated for original infections of secondary syphilis and followed up for more than one year without retreatment, 367 (22.7 per cent) were still seropositive more than one year after treatment. The highest percentage of prolonged seropositivity happened to occur in a relatively small series of ninety-two patients treated with 9,000,000 units of penicillin over a fifteen-day period. This was the largest amount of penicillin given over the longest period in the nine different treatment groups. It was followed by the smallest percentage of retreatment due to relapse or reinfection and was, therefore, highly successful, in spite of the high percentage of prolonged seropositivity following treatment. I mention this fact not to indicate that large amounts of penicillin given over a fifteen-day period actually favor prolonged seropositivity because our findings in this respect are not conclusive but they do indicate that increasing the amount and duration of treatment has no effect in shortening the duration of seropositivity after treatment. Table I shows the time intervals at which patients treated with one of the nine schedules became seronegative or were still seropositive more than one year after treatment. None of these patients was retreated at any time.

To discover the effect of re-treatment on patients with prolonged seropositivity after treatment of secondary syphilis we re-treated all patients with positive Kahn tests in dilutions of 1 : 4 or

TABLE I. DURATION OF SEROPOSITIVITY IN PATIENTS TREATED FOR FIRST INFECTIONS OF SECONDARY SYPHILIS AND NOT RE-TREATED EXCEPT FOR SERORESISTANCE

	Number	Per Cent
Number of men followed up 1 year or more without re-treatment	652	100.00
Number of men followed up 1 year or more who became seronegative within 1 year	533	81.74
Number of women followed up 1 year or more without re-treatment	968	100.00
Number of women followed up 1 year or more who became seronegative within 1 year	720	74.38
Total cases followed up 1 year or more without re-treatment	1620	100.00
Number who became seronegative within 1 year	1253	77.30

INTERVALS 1 OR MORE YEARS AFTER TREATMENT WHEN 367 PATIENTS BECAME SERONEGATIVE OR WERE STILL SEROPOSITIVE

	13-24 Mos.	25-36 Mos.	37-48 Mos.	49-60 Mos.	61-72 Mos.	73-84 Mos.	85 Mos.	Total	
								Number	Per Cent of Total Followed Up
Number of men who became seronegative at designated intervals	40	9	6	2	3	1	0	61	3.80
Number of men still seropositive when last examined	30	6	5	2	3	2	0	48	3.00
Number of women who became seronegative at designated intervals	130	26	7	6	4	0	0	173	10.70
Number of women still seropositive when last examined	32	9	8	4	3	3	1	60	3.70
Number re-treated for seroresistance 9 or more months after original treatment								25	1.50
Total seropositive more than 1 year	232	50	26	14	13	6	1	367	22.70

TABLE II. NUMBER OF PATIENTS STILL SEROPOSITIVE AT DESIGNATED PERIOD OF FOLLOW-UP AFTER FIRST TREATMENT FOR SERORESISTANCE

	6-12 Mos.	13-24 Mos.	25-36 Mos.	37-48 Mos.	49-60 Mos.	61-72 Mos.	73-85 Mos.	Total
Number of Patients	6	13	5	9	11	5	1	50

more nine or more months after treatment. Prolonged seropositivity with relatively high STS titers is not common but when it occurs we have not found that re-treatment has any significant effect on the titers. Of fifty-one patients followed up more than two years after their original treatment and more than six months after re-treatment for seroresistance, fifty were still seropositive when last examined. Some of these patients were re-treated two to four times. The largest amount of penicillin given for any one re-treatment was 60,000,000 units and two of the group re-treated for seroresistance received courses of arsenicals and bismuth. Table II shows the intervals of time after re-treatment that these seropositive cases have been observed. From this analysis and also from observation of patients treated for early syphilis with rapid arsenotherapy between 1939 and 1944, I am convinced that prolonged seropositivity after treatment of early syphilis, in the absence of relapse, reinfection or positive spinal fluid findings, does not mean a continuance of the infection. In any case, if these patients are not actually cured, we have found that no antisyphilitic therapy has any effect on their STS titers.

When treatment is given during the chronic stage of syphilis it is, of course, well known that the tendency to seroresistance after treatment is greatly enhanced. From 65 to 75 per cent of patients treated for late syphilis have remained seropositive for at least ten years, regardless of the amount or duration of treatment. The most authoritative evidence for this statement is provided by a current study in New York State prisons where over 3,000 patients have been followed up for ten years or more since their first treatment for late syphilis. Many were re-treated for seroresistance with various types and amounts of therapy without reversing their STS to negative. Patients with high STS titers at the time of treatment for late syphilis usually have significant drops in titers during the first year after treatment but the serologic pattern varies greatly. Some patients continue to have relatively high titers over the years and others may have negative tests interspersed between positive tests.

The assumption that seroresistance following treatment of syphilis means a persistence of the infection is certainly not warranted by the known facts. Patients still seropositive after good treatment have rarely shown evidence of progression of their disease in well-controlled studies. Furthermore antibodies continue to be demonstrated fol-

lowing cure or permanent arrest of many infections and there is no reason why this should not be true of syphilis. The goal of therapy in late syphilis is not seronegativity but permanent arrest of the disease. We may well ask, however, how the latter is to be determined.

The answer to this question is not easy. In fact in many cases there is no direct way of proving permanent arrest of the disease. This unfortunate fact has been the cause of much confusion in evaluating the effect of treatment, especially of late syphilis.

In such diseases as tuberculosis and rheumatic heart disease we have fairly satisfactory means of differentiating between activity and inactivity and treatment is governed accordingly. We do not treat healed pulmonary tuberculosis or inactive rheumatic heart disease, regardless of symptoms due to scar tissue, in the same manner as active cases are treated. In the treatment of late syphilis, however, many physicians have made little effort to distinguish between signs and symptoms due to permanently damaged tissues where healing had already occurred and those due to active infections. This is not surprising since in cardiovascular syphilis, for example, there is no way of determining the degree of active syphilitic inflammation in a dilated aorta or in damaged aortic valves. In treated cases complete healing of the inflammatory process may have taken place, but healing is not reflected in the width of the aorta or by cure of aortic insufficiency. Our present inability to prove permanent arrest of cardiovascular syphilis is unfortunate but it is not cause for despair or complete abandonment of all efforts to think of late syphilis in terms of activity versus inactivity. When direct approaches to the solution of a problem are unavailable, we do well to search for the most plausible solution by whatever means are available. For example, determining the treatment of cardiovascular syphilis by analogy with other types of late syphilis may be far from satisfactory but it is better than nothing.

Fortunately in neurosyphilis we have reasonably accurate tests for determining the activity of the infection. The late Dr. Dattner—a neurologist who was associated with Wagner-Jauregg when the latter started malaria therapy of general paresis in Vienna—recognized the difficulties in determining the activity of neurosyphilis by clinical signs and symptoms. He was aware of the futility of attempting to change clinical manifestations due to permanently damaged nerve tissue by treatment designed to kill spirochetes. Consequently he turned to spinal fluid examinations for assistance in the dilemma. Over years of study he found that active neurosyphilis is reflected by increased cells in the spinal fluid and oftentimes by increased total protein. Inactivity following treatment is determined by serial spinal fluid examinations at six-month intervals. Within three to six months after the onset of treatment cell counts should be less than 5 per cu. mm. and elevated total protein determinations should show improvement and, as a rule, be normal within twelve to fifteen months after the beginning of treatment. Quantitative specific tests for syphilis of the spinal fluid should show a gradual decline following treatment but they may not become normal for five to eight years after treatment. Failure of therapy to inactivate the infection in the central nervous system is shown by continued pleocytosis or by relapse back to pleocytosis after the cell counts have become normal and by rises in the titers from previous levels of the specific tests for syphilis of the spinal fluid.

By the time of his death Dattner had collected data on many hundreds of patients treated for neurosyphilis and followed them for from five to twenty years. In my judgment he had proved beyond doubt the validity of his belief that active neurosyphilis could be differentiated from inactive cases by means of spinal fluid examinations. Certainly such tests are far more reliable than clinical signs and symptoms which often persist long after the infection has been arrested or cured.

Another observation made by Dattner and confirmed in my experience is that neurosyphilis does not relapse more than two years after treatment. In other words when treatment has arrested the infection, as proved by spinal fluid examinations, relapses have not been observed more than two years after treatment. This is an important observation because it strikes against an old, prevalent belief that syphilis is a relapsing disease that may become active many years after treatment has produced inactivity. It is, of course, true that uncured syphilis may progress very slowly and cause signs and symptoms late in the course of the disease but we now have evidence from the treatment of early syphilis and of neurosyphilis that, when the disease has been inactivated for two years after treatment, relapse back to activity is unlikely. It is certainly desirable to accumulate as

many data as possible on prolonged follow-ups of patients treated for syphilis, but it is not necessarily true that a new treatment must be evaluated for twenty or more years before we can be sure of its efficacy. That belief was formerly founded in a reasonably sound conservatism but we are not being conservative when we fail to give full credence to the most plausible conclusions based on observed facts. True conservatism insists on conserving the truth as it is demonstrated. In science, truth, as we know it, is not absolute but relative and we necessarily rely on it only as long as it can be confirmed by experience. My own experience, as well as my knowledge of the modern literature on syphilis, leads me to the conclusion that, once inactivated for two years, syphilis rarely, if ever, subsequently relapses back to activity. Possible exceptions do not disprove the rule because we are all aware that most rules in medicine have exceptions as is proved by the old and apt saying that it is the exceptions that prove the rule.

Following treatment of early syphilis, I think inactivity can be assumed if the blood tests have become negative or fallen to low titers and the physical and spinal fluid examinations are negative two years later. Following treatment of late neurosyphilis, I think inactivity can be assumed if the spinal fluid examination two years after treatment shows normal cell counts and total protein and there has been a definite decline in the quantitative specific tests for syphilis of the spinal fluid.

Although we have no means of determining the activity of the infection following treatment of asymptomatic late syphilis or of cardiovascular syphilis, by analogy with neurosyphilis, it is probable that treatment that has proved capable of inactivating neurosyphilis in a high percentage of cases will prove equally effective in other types of late syphilis. Certainly such treatment should be adequate for asymptomatic latent cases. Some investigators favor higher total doses of penicillin for cardiovascular syphilis than for neurosyphilis but, as yet, we have no adequate data for determining the treatment needed for cardiovascular syphilis other than by analogy with neurosyphilis.

Before concluding this necessarily brief discussion of the differentiation between active and inactive syphilis I hope that I have not minimized its difficulties. In presenting the conclusions reached I do not mean to infer that they are final or unalterable. From the data now at hand the conclusions seem to me the most plausible that can be made. I think we should be guided by them until they are proved wrong, not by some one's opinion, but by facts that demand a different interpretation of the data than I have given. Possibly one of the factors favoring the belief that syphilis may relapse years after it has apparently been inactivated by treatment is the tendency to attribute otherwise undiagnosed signs and symptoms to syphilis when a patient has a known history of syphilis or positive STS. In my experience signs and symptoms that do not respond to penicillin are in all probability not due to syphilis or they are due to permanently injured tissues than cannot be altered by treatment designed to kill the *Trepenoma pallidum.*

Turning now to the details of treatment, I think that the great majority of syphilologists are now agreed that penicillin is the treatment of choice for all types of syphilis. In my own experience there is little or no excuse for the continued use of arsenicals and bismuth. Procaine penicillin in oil and aluminum monostearate can be given to ambulatory patients in doses of 1,200,000 units (4 cc.) three or two times a week. Smaller individual doses, such as 600,000 units, can be used and the number of injections increased but there is no proved advantage in increasing the number of injections in this way. For routine use we have found at Bellevue Hospital that three or four injections of 1,200,000 units are ample for most cases of early syphilis in the primary and secondary stage. For secondary syphilis of long duration the number of injections might well be increased to five for a total of 6,000,000 units which is the amount we use for late asymptomatic cases. For neurosyphilis and for late symptomatic syphilis our routine therapy consists of eight injections of 1,200,000 units, individual injections being given three or two times a week. For relapses it may be necessary at times to double the original treatment and in very rare cases it is possible that fever therapy may still be advisable.

The Treponema Pallida Immobilization Test in the Diagnosis of Syphilis

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IN MANY patients, the diagnosis of syphilis is made almost exclusively on the results of serologic blood tests. These tests are based on the presence of a substance in the blood called reagin, which is detected by lipid antigens prepared from normal animal tissue. Reagin is developed not only in the presence of syphilitic infections, but it is also found in some normal people and in patients with a variety of infectious and noninfectious diseases. These two factors have stimulated considerable controversy over the specific nature of the standard serologic tests for syphilis and the exact immunologic nature of reagin.

For many years investigations have been directed towards the development of a specific test for syphilis. Numerous procedures have been devised and proposed but none appeared sufficiently useful or dependable to receive wide application. In 1949, Nelson and Mayer described the Treponema Pallidum Immobilization Test (TPI) based on the presence of an antibody distinct from reagin. The existence of a specific treponemicidal antibody had been previously demonstrated by earlier workers who showed by animal inoculation that virulent spirochetes were either killed or markedly attenuated by syphilitic serum.

In 1948, Nelson reported the preparation of a liquid medium and an improved incubation procedure by which it was possible to maintain cultures of motile, virulent *T. pallida* for five to ten days. Employing these techniques, Nelson and Mayer evolved the TPI test, in which an emulsion of motile treponemes is mixed with complement and then with serum or spinal fluid. This mixture is incubated under special conditions and the results observed directly in the darkfield microscope. With syphilitic serum and active complement, the treponemes are immobilized and killed. With normal serum and active complement, treponemes are not immobilized or killed.

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The TPI test, at its present stage of development, is too expensive, complex and cumbersome for routine diagnostic purposes. As a matter of fact, only about ten laboratories in this country are known to be employing this method at the present. However, in spite of its many current handicaps, this test presents a promising new tool for fundamental studies of immunity in syphilis.

The most immediate practical application of the TPI test from the clinical standpoint is its potential value in the differentiation between true and false positive reactions obtained with the standard serologic tests for syphilis.

The essential materials necessary for the performance of the TPI test are media, motile treponemes, fresh complement and serum or spinal fluid. It should be pointed out at this time that bacterial contamination must be avoided. Therefore, in every step, from the original collection of the blood specimen to the final reading of the test, strict aseptic technique must be employed.

The virulent motile treponemes are maintained by regular intratesticular passage of *Treponema pallida* (Nichols strain) in rabbits. For use in the tests, testes are removed within forty-eight hours after the first indications of a clinical orchitis. The excised testes are sliced and placed in a flask of Nelson's medium which is evacuated and filled with a gaseous mixture of 5 per cent carbon dioxide and 95 per cent nitrogen. The flask is placed in a 35° C. water bath and the treponemes are extracted with gentle shaking. The extracted treponemes are then freed of tissue debris, cells, et cetera, by filtration. The approximate number of organisms, as well as the percentage of motile treponemes, in the filtrate is determined.

Complement is obtained by pooling sera from ten or more guinea pigs. It is distributed into small containers and preserved in the frozen state in solid carbon dioxide.

Blood or spinal fluid is collected in chemically clean, sterile tubes without any added preservative. The serum can be frozen and stored until tested. All sera are inactivated at 56° C. for thirty minutes, just prior to use.

In the actual test, all controls and test sera are set up in duplicate as follows:

0.05 ml. of serum (or PSS) in each of 2 Kahn tubes
0.30 ml. of filtered treponeme suspension into each serum

TABLE I.

Tube	Serum	Comp.*	Trep. Pallida	No. Motile	Per Cent Motile	Per Cent Difference	Result	Residual Comp.**
1	PSS	PSS	0.3 ml.	25	100	–	O.K.	–
2	PSS	PSS	p.3 ml.	24	96			
3	PSS	+	0.3 ml.	24	96	4	O.K.	++++
4	PSS	–	0.3 ml.	25	100			–
5	known	+	0.3 ml.	24	96	4	Negative	++++
6	neg.	–	0.3 ml.	25	100			–
7	known	+	0.3 ml.	0	0	96	Positive	++++
8	pos.	–	0.3 ml.	24	96			–
9	Serum	+	0.3 ml.	21	84	12	Negative	++++
10	A	–	0.3 ml.	24	96			–
11	Serum	+	0.3 ml.	4	16	80	Positive	++++
12	B	–	0.3 ml.	24	96			–
13	Serum	+	0.3 ml.	9	36	36	Doubtful	++++
14	C	–	0.3 ml.	18	72			–

*+ indicates active complement, – indicates inactive complement.
**++++ represents complete hemolysis which indicates presence of residual active complement.

0.10 ml. of active complement in one tube of the pair
0.10 ml. of inactive complement in the other tube of the pair

The tubes are incubated in a Brewer anerobic jar filled with CO_2-N_2 gas mixture for sixteen to eighteen hours at 35° C. Percentages of motile organisms are determined by recording the number of motile treponemes in the first twenty-five counted and multiplying this number by a factor of four.

After the tests have been read, all mixtures of treponemes, sera and complement that do not produce immobilization should be tested for the presence of residual active complement by the addition of a sensitized sheep red blood cell hemolytic system. This will eliminate the reporting of false negatives which are due to anticomplementary activity in the mixtures.

The criteria used for interpreting the results of a serum or spinal fluid test in our laboratory are as follows:

1. The number of motile treponemes are counted in the tubes containing active and inactive complement and the percentage of motility is calculated. There should be little or no immobilization in the tube containing inactive complement.

2. The difference in the percentage of motile treponemes in the duplicate tubes is then recorded. A difference of 50 per cent or higher is considered a positive test for syphilis; a difference of 21-49 per cent is a doubtful test; and a difference of 20 per cent or less is a negative test.

In order to show the technical setup and the criteria for interpretation of this test, an illustrative assay chart is shown (Table I).

Having given some of the background and techinal aspects of the TPI test, there are other questions of a theoretical or technical nature which perhaps merit brief mention.

I. What evidence exists that reagin and immobilizing antibody are different?
   A. Relative heat stability of reagin and immobilizing antibody.
      1. Decreasing reagin titer after thirty minutes heating at 56°, 60°, 64° or 68° C.
      2. Immobilizing antibody stable at these temperatures and also after fifteen minutes heating at 72° C.
   B. Absorption experiments. Syphilitic sera absorbed one or more times with lipid antigen show a progressive decrease, to complete elimination, of reagin titer. These same sera showed no detectable decrease in immobilizing activity when tested in the usual manner.

II. Is the immobilizing antibody also treponemicidal?
   A. *In vitro* experiments.
      1. The incubation of a mixture of syphilitic serum plus spirochetes results in immobilization and death of the organisms.
   B. *In vivo* experiments.
      1. In the period immediately after immunizing infection there is perhaps a

crude correlation between immobilizing titer and resistance to reinfection which resistance it is assumed is due, in part if not completely, to the treponemicidal action of the blood.

2. In the period several months or more after the termination of an immunizing infection there is apparently no correlation between the immobilizing titer of serum and resistance to reinfection.

III. What is the probable effect of therapy on the TPI test?

A. Recent therapy with relatively high residual blood concentrations of penicillin or other treponemicidal agents will cause nonspecific immobilization. If penicillin is known to be present in the specimen, most nonspecific reactions can be overcome by the addition of penicillinase.

B. Therapy given years prior to performing TPI test may have the following effects:

1. If adequate treatment was given during the early stage of syphilis, the TPI test is usually negative.
2. If treatment was given in the later stages of the infection and/or was inadequate, the TPI test is usually positive.

IV. Do false negative and false positive reactions occur in the TPI test?

A. False negatives—except in some cases of primary syphilis, the most common cause is the anticomplementary effects of the test mixture. This is not too frequently encountered.

B. False positive (technical).

1. Chance occurrence of glassware that is not chemically clean (acid, alkali, et cetera).
2. Presensitized spirochetes in test emulsion prepared from testes with advanced orchitis.

C. False positives (clinical).

1. Positive immobilization occurs in yaws, pinta and bejel but not in leptospirosis, rat bite fever, relapsing fever or Vincent's infections. In the other infections and conditions which frequently give rise to false positive reactions in the standard tests for syphilis, it appears from the limited reports available, that the incidence of false positives is reduced to the level of the expected incidence of syphilis in the particular socio-economic groups tested. These positive reactions perhaps are not false but true positive tests for syphilis.

TABLE II.

Clinical Stage	Serum	Spinal Fluid
Primary	50- 75%	—
Secondary	90-100%	—
Latent	95-100%	25%
Asymptomatic neuro-syphilis	100%	100%
Symptomatic neuro-syphilis	100%	100%
Congenital	100%	—

V. What is the probable average occurrence of positive immobilization tests with serum or spinal fluid taken at various clinical stages of syphilis?

A. A rough approximation of the results reported by several investigators and those obtained in this laboratory is given in Table II.

Summary

The Treponema Pallida Immobilization Test is a relatively new procedure in the array of laboratory tests used in the diagnosis of syphilis. The test is based on reactions between *Treponema pallida* and a specific treponemal antibody in serum or spinal fluid. The existence of this technique, which is specific in the classical immunologic view, offers great hope for enlarging the fundamental knowledge of immunity in syphilis.

The most practical clinical application of the test, at the present time, is its potential value in the differentiation between the true and false positive reactions that occur with the current standard serologic tests for syphilis.

The brief discussion of the Treponema Immobilization Test given in this paper is based on the publications of other investigators studying this procedure and also upon unpublished data from our laboratory.

Three appendices are attached to this paper.

Appendix 1—List of publications on the T.P.I. Test.

Appendix 2—Replies to specific inquiries that may be of general interest and value.

Appendix 3—Request form for T.P.I. Test (These forms are available upon request. Full answers to all questions are essential in order to help us evaluate the test and to guide us in efforts to improve the method).

Appendix 1

Publications—Treponema Pallidum Immobilization Procedure

1. Chorpenning, F. W.; Sanders, R. W., and Kent, J. F.; Treponema immobilization test using organisms from frozen testis Am. J. Syph., Gonor. & Ven. Dis., 36, 401-406, 1952.
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Appendix 2

A number of health officers and practicing physicians who are interested in utilizing the Treponemal Immobilization Test have requested specific practical information relative to the application, availability and cost of the test. In view of the possibility that others may be interested in these and similar questions, this appendix has been prepared in order to make the information generally accessible.

1. The Dermatology Research Laboratory, University Hospital, Ann Arbor, has the facilities for performing the TPI Test.
2. Requests for TPI Test should be made only after two or more standard tests for syphilis (STS) have been performed.
3. Serum from recently treated cases, except where penicillin was the drug employed, cannot be tested. Treatment regimen should accompany all requests for tests.
4. The TPI Test should be requested only in problem cases, such as suspected acute or chronic false positive reactors. This test should not be viewed as a routine test supplanting the present standard tests.
5. Performance of the test is costly but it is hoped that anticipated investigations in this laboratory will ultimately reduce costs. Currently, about fifty guinea pigs and forty rabbits must be kept on hand in air-conditioned animal rooms. Approximately fifteen rabbits are inoculated monthly for test purposes. Special glassware and equipment are used. All glassware and instruments must be chemically clean, individually wrapped and then sterilized. Biologicals used in culture media, complement, and sheep red cells are quite labile and should be replaced at monthly or bi-monthly intervals.
6. Actual technical performance of the test requires about twenty hours. In our present circumstances, results should be available in about ten days. However, if the serum is contaminated or markedly hemolyzed, a new specimen must be obtained. If the laboratory is not informed that penicillin has been administered recently, for any purpose, the test has to be repeated and reports are further delayed.
7. Interpretation of results.
   Positive—Repeat positive T.P.I. Tests indicate that the patient has, or has had syphilis, or some other treponemal infection; namely, yaws, pinta or bejel.
   Inconclusive—Doubtful or inconclusive tests are rare and usually indicate that the patient had syphilis, was treated, and the antibody content is declining to low levels. (All inconclusive specimens

should be repeated on two specimens taken subsequent to the first report.)

Negative—Repeated negative tests indicate that the patient does *not* have syphilis, and that the positive STS is a biologically false positive reaction. The recurrence of a positive STS in the future is adequate reason to request a repeat T.P.I. Test in order to rule out actual infection which may occur in an individual predisposed to false positive reactions.

8. A comparison of results obtained with the T.P.I. Test and the Kahn Verification Test has been reported by Dr. Richard Harrell of the University of Michigan Dermatology Department. Only a brief summary of these data will be presented in this appendix.

Forty-eight patients were selected on the following criteria:

A. Positive routine Kahn Tests.
B. Negative history of syphilis.
C. No positive physical findings of syphilis.
D. The diagnosis of a probable biologic false positive reactor made by a member of the Department of Dermatology and Syphilology.

Twenty-eight of these patients gave negative T.P.I. Tests of which eighteen (64 per cent) gave a biologic false positive type reaction and ten (36 per cent) gave an inconclusive or syphilitic type reaction in the Kahn Verification Test.

The other twenty patients gave positive T.P.I. test reactions of which fourteen (70 per cent) gave a syphilitic type reaction and six (30 per cent) gave an inconclusive or biologic false positive reaction in the Kahn Verification Test.

Commenting on the relative value of the T.P.I. Test and the Kahn Verification Test in distinguishing between true and false positive reactions, Dr. A. C. Curtis, Chairman of the Department of Dermatology and Syphilology, states that the Kahn Verification Test is not the answer to this problem and that at the present time the Treponemal Immobilization Test, based on specific antigen-antibody reactions, offers the greatest hope in this field.

Appendix 3

REQUEST FOR TREPONEMAL IMMOBILIZATION TEST FOR SYPHILIS

Physician's Name & Address	Date	Location	Service
	Patient Reg. No. Name Address		Lab. No.

SPECIMEN	PENICILLIN CHEMOTHERAPY*
(taken aseptically without added preservative)	(for any reason within the past 21 days)
.....blood, ...serum, ...CSF	.....yes, ...no, ...do not know
Date taken ....., 195.....	Dates: .....
	Regimen: .....

STANDARD SEROLOGIC TESTS FOR SYPHILIS (STS): Current Findings.

	Date	Name of Test	Results	Laboratory
First positive or				
doubtful STS				
Second positive or				
doubtful STS				
(confirming test)				

HISTORY

1. Has patient ever been diagnosed as having syphilis? .....no, ...yes. Date.....
2. Has patient ever been treated for syphilis? .....no, ...yes. Date.....
3. Has patient ever had spinal fluid examination? .....no, ...yes. Date.....
   .....STS, ...colloidal gold curve, ...cells, ...protein.
4. Date of last negative STS, prior to present series of positives.....

TENTATIVE CLINICAL DIAGNOSIS

SYPHILIS: .....no, ...yes: .....early, ...early latent, ...late latent, ...late benign (gumma), ...cardiovascular, ...neuro., ...congenital, other.....

OTHER V.D.: .....no, ...yes. (specify).....

*Indicate here any antibiotic or drug therapy other than penicillin within the past 21 days.
Drug ....., Date.....
Regimen .....

TREPONEMA PALLIDA IMMOBILIZATION TEST—WHEELER

OTHER DISEASES POSSIBLY CAUSING POSITIVE STS

1. Were there any diseases, vaccinations or other conditions which suggest a biologic false positive STS? .....no, ...yes.
2. Check below if there is a history of the following conditions *within 6 months prior to the first positive STS in current examinations:*

	No	Yes	Date
Pneumonia, viral			
Severe upper respiratory infection			
Infectious mononucleosis			
Infectious hepatitis			
Lupus erythematosus			
Tuberculosis			
Measles			
Mumps			
Chicken pox			
Scarlet fever			
Malaria			
Subacute bacterial endocarditis			
Rheumatoid arthritis			
Pregnancy			
Malignancy			
Pneumonia, bacterial			
Blood loss (donor)			
Immunization (specify)			
Other conditions (specify)			

Remarks:

Dermatology Research Laboratory—University Hospital,
Ann Arbor, Michigan

EPIDEMIOLOGY OF VENEREAL DISEASES

(Continued from Page 853)

fifteen to forty who have made the decision to be promiscuous beyond a certain degree which is difficult to define.

2. A female reservoir of acute syphilis and gonorrhea exists and cannot be identified by any other known means than the epidemiologic studies of reported cases in men.

3. The same age-race-socioeconomic segment of the population group furnishes most of the new recruits to the venereal disease reservoir each year. However, there appears to be an unreal difference in the number of acute cases of gonorrhea and syphilis reported annually in men and women, possibly based on anatomic and clinical differences.

4. The same working team, the same techniques, the same antibiotic, in the same dose, can be used to reduce infectiousness in known cases and in known female contacts of infectious venereal disease.

Non-Specific Urethritis— A New Venereal Disease? To Date—No!

A Preliminary Note

By Robert S. Breakey, M.D.
Lansing, Michigan *

BECAUSE of material submitted for consideration at a meeting of the Experimental Therapeutics Study Section — Division of Research Grants—National Institute of Health, United States Public Health Service in December, 1952, the question of non-specific or non-gonococcal urethritis was brought to the immediate attention of the Venereal Disease Control Committee of the Michigan State Medical Society, January 18, 1953. These reports, some of which have been subsequently published, postulated a new or sixth venereal disease and endeavored to point out a certain specificity for new sexually contracted organisms responsible for this type of urethritis. It was further suggested that this was apparently a new or previously unrecognized disease entity and had become prevalent, or of particular importance, during the recent Korean military action. Certain members of the committee felt that such a new specific venereal disease did not exist and, further, felt quite strongly that the impact of such a suggestion upon the professional and lay minds was highly undesirable unless the hypothesis could be corroborated and thoroughly substantiated.

A sub-committee of the Venereal Disease Control Committee, consisting of Dr. Loren Shaffer, chairman of the committee, and the writer, was appointed to investigate this question and, upon the endorsement of the State Venereal Disease Control Committee, the matter was submitted to the Detroit Branch of the American Urologic Association at its subsequent meeting January 25, of this year. All of the urologists present at this meeting were unanimously opposed to the suggestion, or acceptance, of a "sixth venereal disease." Much effort and time have been spent in the past five or six months in an endeavor to obtain all evidence possible concerning this question, which, to say the least, has become highly controversial.

Certainly if the premise is accepted or demonstrated, a new epidemiological field is opened, a new source of fear to the lay public is threatened, and a new complication is proposed to the individual practicing physician from a diagnostic viewpoint. The authorities so far recently reviewed advocating recognition of such a sexually contracted specific disease, however, have not been uniform in their reports as to etiologic agents. The pleuro-pneumonia-like organisms are stated by some as etiologic. Others report virus involvement of specific characteristics. Still others quote the mimeae. Additional organisms previously unreported are ascribed the responsibility for this so-called new disease. Shaffer, in the consideration of a large number of non-specific urethridities, has been unable to demonstrate a specific etiologic organism. The urologic clinic at the University of Michigan has further been unable to substantiate such specificity. There are a very large number of etiologic factors which individually or together will produce varying degrees of urethral reaction, these from moderate to profound.

However, it is very widely accepted that at the present time the nonspecific urethridities present considerably more of a problem in diagnosis, management, and treatment than do the gonococcal urethridities. The latter in the past have been of great importance and amenable to antibiotic therapy (penicillin and several others) and thus the infectivity of this disease has almost been nullified because of the eradication of the active, infected case in so short a time. It is to be pointed out and emphasized that many physicians are now making no attempt at accurate diagnosis. All discharges are assumed to be gonorrheal and the patients receive penicillin or other antibiotics. Those that fail to respond are often classified as "penicillin resistant gonococcal" infections. This error, unfortunately, is becoming more frequent and is to be deplored. Non-specific urethritis has always been present, but whereas gonococcal urethridities far exceeded those of non-gonococcal origin previously, greater attention was paid to this entity. Familiarity breeds contempt, and all too often at present, such apparently has become the fact as to accurate diagnosis of urethral discharges. Such diagnosis is totally impossible without microscopic examination.

* Dr. Breakey is chairman of the sub-committee of the Venereal Disease Control Committee, Michigan State Medical Society.

Most authorities conclude that the PPLO organisms are all penicillin resistant and are possible mutation forms or variants of other standard and common organisms, i.e., staphylococci or certain bacilli. Treatment of any case of non-specific urethritis, which is more commonly seen now than ever before in clinics and in individual urologic practices, must depend entirely upon an accurate diagnostic determination of the true etiology. Assumptions as to specificity or non-specificity are not justified and must reflect to the discredit of the physician who fails to determine the true cause.

To date there has been no consistent confirmation of the hypothesis of such a new sixth venereal disease. However, neglect on the part of many physicians has contributed to the question raised. In no case should gonococcal infections be assumed or discarded, nor should there be an assumption of penicillin resistant gonococci unless such a fact has been firmly demonstrated. Many gonococcal infections are secondarily infected and the secondary invader may prolong the urethritis after the original gonococcal organism has been completely destroyed. At the present time various military stations report an incidence of three non-specific urethridities to one gonococcal. This is substantiated, and an increase of lesser degree is corroborated by Shaffer. In my own experience in private urologic practice I would place the incidence at least at twelve to one. The actual gonococcal infections are satisfactorily cured by any physician with a syringe and the availability of penicillin. There is no need to further refer these infections to any limited field of practice.

Undoubtedly the facilities available with antibiotic attack upon the gonococcus have permitted a much larger number of physicians to satisfactorily treat this disease. With increased numbers treating and simplified facilities for doing so, the possibility of greatly minimizing the incidence of gonorrhea can well be appreciated, and has, in fact, been manifest over a period of the past ten years. However, possibly through complaisance, both on the part of the physician and also the lay individual involved, the rate of gonococcal infections in Michigan has very definitely increased in 1953 over those cases reported in 1952. It is urged that the great achievement which has been demonstrated over the past period of years be maintained and increased and that doctors of medicine retain a high index of suspicion. No disease can be treated satisfactorily without the certainty of diagnosis. This will involve a careful search for the etiologic factors in order that treatment may be adequately directed to eradicate these. If the various committees mentioned and the editorial board of the JOURNAL wish an additional authenticated and detailed report on the question of non-specific urethritis ("a New and Sixth venereal disease"?) this will be submitted for future publication. At the present time our committee feels that the assumption is totally unwarranted and has not been verified or sustained by any consistent group of investigators. William Ferguson, Coordinating Bacteriologist of the State Department of Health, advises us that until the disease has been reproduced in man it cannot be determined to be a definite entity. To his knowledge this has not as yet been done.

The committee regrets that its accumulated material, which is rather voluminous, has not been completely digested and cannot as yet be adequately presented.

1211 Bank of Lansing Bldg.

A CHERISHED LETTER

(Continued from Page 826))

—you never bring back enough fish or game to justify the expense.

8. It is a poor policy to take all the vacation time which is provided for you.
9. Golf, bowling, pool, billiards, cards, gardening, et cetera, are a waste of time.
10. Never delegate responsibility to others—carry the entire load at all times.
11. If your work calls for traveling—work all day and drive all night to make your appointment for the next morning.

Thus far, I have completed my hospital session. I am at home now with orders to take it easy, and that will be the schedule for several months.

Just a friendly tip, now that I am in the Club, my advice to you is to stay out of it. The dues are very high. I know a hundred different ways now that I would rather spend my money and my time, than honoring Her Majesty with my membership in the Coronary Club.

Sincerely,
A. G. KETTUNEN
East Lansing, Michigan

Detroit Mass Blood Survey

Loren W. Shaffer, M.D.
Detroit, Michigan

A MASS blood survey was carried out in Detroit with the assistance of the U. S. Public Health Service, from May 1, 1952, to July 15, 1952. Blood tests were taken in selected areas in which a high incidence of syphilis was suspected. A chest x-ray survey using ambulatory equipment was combined with the mass blood testing program. This report, however, deals purely with the results of the mass blood survey.

A total of 41,097 blood tests were taken. Of this number a total 2,772 (6.7 per cent) of the tests were reported positive; 1.8 per cent of the white volunteers tested were found to be positive, and 8.2 per cent of colored volunteers were found positive.

Of the total number volunteering for blood tests, 52 per cent were women and 48 per cent were men. It was rather surprising that the majority of the individuals tested were in the older age groups, there being only 10 per cent who were less than twenty-five years of age; 32 per cent were between the ages of twenty-five and forty; 45 per cent between the ages of forty and sixty, and 13 per cent were over the age of sixty.

The incidence of infection in colored began with approximately 2 per cent of men and women in the age group of fifteen or less. It rose rather rapidly through the age groups of fifteen to twenty-four, twenty-five to thirty-four, thirty-five to forty-four, forty-five to fifty-four, reaching a peak in the age group of fifty-five to sixty-four in which it was, respectively, 15.9 per cent of colored men and 12.9 per cent of colored women. In whites the peak in women was reached at 2.2 per cent in the age group of forty-five to fifty-four, but in white men it reached a peak of 5.5 per cent in the group of sixty-five or over.

An effort was made to contact all volunteers on whom doubtful or positive reports were received and to determine whether their syphilis had been previously recognized and if treatment had already been administered. It was rather surprising to find that only 23 per cent were previously unknown and untreated. In an additional 26 per cent, although previously known and treated, their treatment was considered inadequate and further treatment was given. In other words, 49 per cent of the positive cases had either been previously unknown and untreated or inadequately treated. The remaining 52 per cent were either under treatment when tested or were evaluated as having had previous adequate treatment.

It was also rather disappointing that only one case of primary and two cases of secondary syphilis were found by this study. This indicates that although such mass blood surveys are a valuable and effective means of finding late syphilis, they are not productive as a method of finding infectious syphilis.

In conclusion, it should be emphasized that such blood surveys of high incidence areas are decidedly worthwhile in finding reservoirs of untreated cases of syphilis. Approximately 1,300 cases of previously unknown or inadequately treated cases were discovered through this survey. The potential cost for hospitalization for the mental and crippling complications that could be expected to develop from such cases would be many times the cost of such surveys plus that of their preventive treatment. It also emphasizes the need of continuing routine blood tests on all admissions to hospitals and pre-employment examinations.

555 Clinton Street

SURVEY SHOWS 87 PER CENT OPPOSE SOCIALIZED MEDICINE

Analysis of a cross section of the 60,000 replies received in answer to 600,000 questionnaires sent out in the fall of 1952 by "A National Committee of Republican Voters" reveals that almost 87 per cent were opposed to the adoption of socialized medicine in the United States. More than 7 per cent were in favor of it and almost 6 per cent were against socialized medicine but in favor of some form of national health insurance.

Highly significant to the medical profession is the fact that even among those definitely opposed to socialized medicine, a substantial proportion of voters throughout the country expressed the opinion that some way must be found to protect the people, especially those in the middle income groups, against the unexpected costs of serious illness.—*AMA Secretary's Letter.*

St. Luke's Hospital Clinico-Pathological Conference

Edited by
J. C. Smith, M.D.
Saginaw, Michigan
Clinical Discussion by B. M. Bullington, M.D.

The patient was a white man, seventy-two years old who was in good health until five months before admission to the hospital. At that time, he noted malaise and moderate anorexia. These persisted but there were no other complaints during the next three months. The patient then experienced an attack of pain in the chest and upper abdomen, of sudden onset which lasted about thirty minutes and subsided. This pain radiated down both arms, chiefly the left, extended to the mid-back and left scapula, and was associated with shortness of breath and a squeezing sensation within the chest. X-ray examination of the upper enteric tract was essentially normal. The patient resumed his usual activities. During the next two months, there were three similar attacks of chest pain.

On the day before admission to the hospital, the patient developed pain, rather suddenly, in the right upper quadrant of the abdomen which radiated to the precordium and down both arms. The pain was followed by nausea and vomiting. There was no hematemesis. The patient stated that he had experienced gaseous distention after meals for the past six months. There had been no jaundice, dyscrasia to fatty foods, dark urine, light stools, ankle edema, or nocturia. The onset of the pain was not related to exertion.

The past history was not contributory.

Physical examination revealed a well-developed and well-nourished white man in no acute distress. The temperature was 98 degrees (F.), pulse 102, respirations 24, and blood pressure 130/90 mm. Hg. The head and neck were normal. The lungs were clear to auscultation and percussion except for rales over both posterior bases. The left border of cardial dullness was 4 cm. to the left of the midclavicular line. The rhythm was regular and no murmurs were heard. The abdomen was rounded, obese, and soft. There was tenderness in the right upper quadrant of the abdomen and the liver was palpated 2 cm. below the right costal margin. No other organs or masses were palpated. There was a small firm mass over the right epididymus and a fluctuant mass over the left epididymus. The external genitalia were otherwise normal. Rectal examination revealed only slight symmetrical enlargement of the prostate that was firm and non-tender. There was no edema of the extremities and neurologic examination was normal.

The urine was clear and acid, with specific gravity of 1.019. There were one plus albumin, 5 to 10 leukocytes per high power field, and a few granular and hyaline casts. Hematologic examination revealed 11.1 grams of hemoglobin per 100 cc. There were 3,800,000 erythrocytes and 8,450 leukocytes per cu. mm. Differential count of 100 cells revealed 80 segmented granulocytes, 5 band cells, and 15 lymphocytes. The icterus index was 0.8. On the day after admission, an electrocardiogram revealed small QRS complexes in the standard leads, evidence of left ventricular hypertrophy, and was otherwise within normal limits. X-rays of the gall bladder revealed normal filling, normal emptying, and no calculi. There were advanced hypertrophic changes in the lower lumbar spine.

On the third hospital day, the patient vomited after experiencing nausea. During the remainder of the hospital course, there was nearly constant dyspnea associated with periods of cyanosis and occasionally pain in the right upper portion of the abdomen. On the tenth hospital day, the pulse was weak, irregular, and fast, and the patient became cyanotic and restless. Dyspnea was progressive and became severe. The patient died quietly on the thirteenth hospital day.

Dr. Bullington.—It is to be noted that this man was well until five months before admission to the hospital. He then developed vague complaints of malaise and moderate anorexia. His first attack was described as pain in the chest and upper abdomen of sudden onset that lasted about thirty minutes and then subsided. It is significant to note that this pain radiated down both arms, chiefly the left, extended to the mid-back and left scapula, and was associated with shortness of breath and a squeezing sensation in the chest. On the day before admission, the patient was described as having pain in the right upper quadrant of the abdomen that radiated to the precordium and down both arms. The pain was followed by nausea and vomiting. There was no hematemesis and the pain was not related to exertion.

In angina pectoris, there is substernal or epigastric pain that radiates to either shoulder, either upper extremity, frequently to the back between the shoulder blades, and occasionally to the angles of the jaw. This pain is almost always related to physical exertion and lasts for a period of a few minutes up to thirty or sixty minutes. The pain of coronary insufficiency, which is a more severe attack of angina pectoris, frequently develops after exercise, or emotional strain, but may also occur during sleep. It is not uncommon for a patient with stenotic coronary arteries, to develop chest pain at night as a result of shift of body fluids, and a reduction of vital capacity. This, coupled with slowing of the heart, causes chest pain as a result of a disproportion of the myocardial need to the amount of blood delivered to the heart. This may occur in what we call the pre-occlusive phase of coronary occlusion. By this, it is meant that the patient will have several attacks of chest pain, some related to physical exertion, and most occurring without the association of emotional disturbance or increased physical activity. The episodes are of increasing frequency, variable duration, and are often followed by coronary occlusion.

The physical examination revealed cardiac enlargement and tachycardia without fever. There were rales at the lung bases, and the liver was somewhat enlarged. The laboratory studies revealed a mild anemia and no leukocytosis. A small amount of albumin and a few white blood cells were present in the urine.

The electrocardiogram was within normal limits except for small QRS complexes in the standard leads and evidence of left ventricular hypertrophy. Any inter-

ference with the transmission of electrical impulses from the heart to the instrument may cause such small complexes. Myxedema may cause such changes. Small QRS complexes are also seen in patients with congestive heart

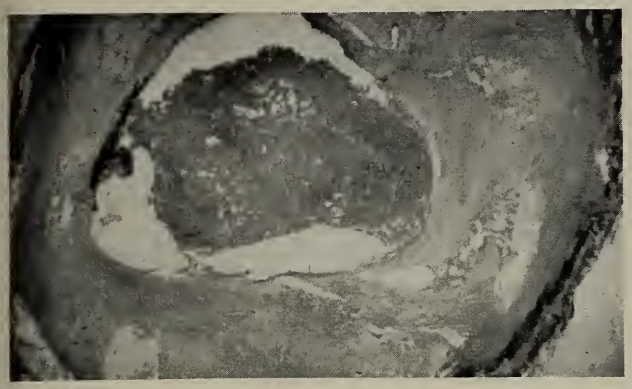


Fig. 1. Recent thrombus of left coronary artery.

failure and peripheral edema. It is also seen in extensive myocardial damage so that the electric potential generated is less than normal. It this case, the small QRS complexes may be explained on the basis of extensive myocardial damage. The record, which is otherwise normal, does not enable me to make a diagnosis of myocardial infarction.

I believe the terminal event with nausea and vomiting, shock, cyanosis and progressive dyspnea seen in this patient represents coronary thrombosis.

The differential diagnosis includes dissecting aneurysm of the aorta, pulmonary embolism, pericarditis, hiatus hernia, and disease of the gall bladder. Dissecting aneurysm of the aorta may be indistinguishable from myocardial infarction or severe angina pectoris. However, the initial pain usually lasts for several days and is followed by a period of days or months in which there is freedom from discomfort. The second episode is often fatal. The physical findings may be entirely normal or there may be the classical discrepancy in the amplitude of the pulses or the obliteration of pulses in one or more of the extremities.

With small pulmonary emboli that reach the surface of the lung, the patient has characteristic pleural pain, which was absent in this patient. When the pulmonary embolus is larger, the chest pain may be severe and may be indistinguishable from that of myocardial anoxia caused by coronary artery disease. There is usually shock and these episodes are frequently fatal. Other findings include cough with bloody sputum, leukocytosis, fever, and tachycardia. The presence of phlebothrombosis or thrombophlebitis also helps in suggesting the diagnosis. When the embolus is large, the electrocardiogram may be characteristic.

The pain of pericarditis is usually localized in the substernal region, and may occasionally be referred to the supraclavicular region or to the epigastrium. This pain is aggravated by breathing and may be accompanied by evidence of infection. The physical findings of a friction rub or an effusion are usually present. Here again, the electrocardiogram may be helpful.

Hiatus hernia of the stomach may produce substernal pain with radiation to the back, left shoulder, or arm. This pain is accentuated on lying down and tends to disappear when the patient sits or stands up. The pain is provoked by any condition that increases intra-abdominal pressure and is thus frequent after meals or after retiring.

Pain may be referred to the chest from other abdominal organs. One of the most puzzling occurs in gall-bladder disease in which the pain radiates anteriorly beneath the sternum and to the left shoulder as well as posteriorally. I believe that this pattern of radiation is unusual and where it occurs must be remembered. A careful history will ordinarily serve to differentiate this

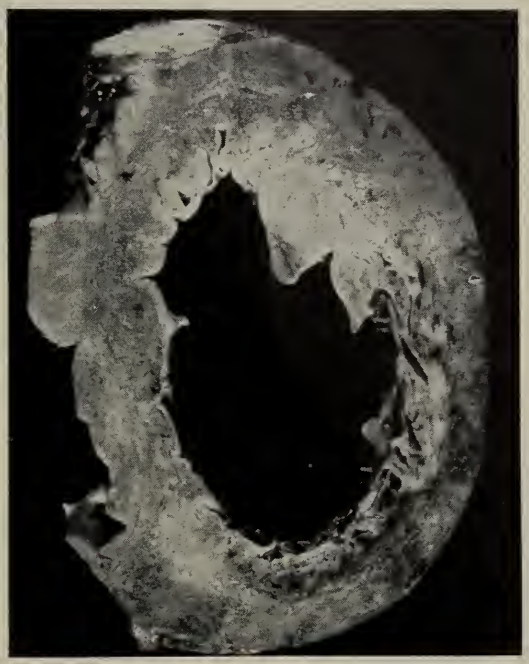


Fig. 2. Recent infarct, posterior wall of left ventricle.

condition from true cardiac pain. In this case, we had the help of a normal gall-bladder x-ray.

It is my impression that this patient had arteriosclerotic heart disease with coronary thrombosis and posterior myocardial infarction as well as cardiac enlargement and early decompensation.

Dr. J. C. Smith:—Do you diagnose recent myocardial infarction with an essentially normal electrocardiogram, a normal blood pressure, and in the absence of a leukocytosis?

Dr. Bullington:—It is my opinion that the other clinical features justify this diagnosis. Posterior infarct is often missed with the routine electrocardiogram. The left leg lead is most helpful in detecting infarcts in this region.

Dr. Bullington's Diagnosis

Arteriosclerotic heart disease with thrombosis of coronary artery and infarction of posterior myocardium.

Anatomic Diagnosis

Recent thrombus of left coronary artery; recent infarct, posterior wall of left ventricle; marked arteriosclerosis of right and left coronary arteries; centrilobular necrosis of liver.

Dr. Smith:—There is a discrepancy between the site of the thrombus in the left coronary artery (Fig. 1) and the site of the infarct in the posterior wall of the left ventricle. (Fig. 2). In this case, there was marked stenosis of the right coronary artery so that oxygenated blood nourished the posterior wall through collaterals from the left coronary artery. With sudden occlusion of the left vessel, the infarct developed in the portion

(Continued on Page 906)

Beaumont Memorial

CORNERSTONE LAYING

Mackinac Island, Michigan
July 17, 1953
at the site . . . 3:00 P.M.

Presiding . . . W. S. Jones, M.D., Menominee
Chairman, Beaumont Memorial Working Committee, Michigan State Medical Society

1. **Welcome**

   By Honorable G. Mennen Williams, Governor of Michigan
   Honorable Leslie O'Brien, Mayor of Mackinac Island
   A. H. Miller, M.D., Gladstone, MSMS Councilor, Twelfth District

2. **Response**

   By William Bromme, M.D., Detroit, Chairman of the Council
   Michigan State Medical Society

3. **Invocation**

   By Rev. Thomas W. Murphy, Detroit
   Cardinal's Representative for Catholic Hospitals

4. **Laying of Stone**

   By MSMS President R. J. Hubbell, M.D., Kalamazoo

   Honorable W. F. Doyle, Mackinac Island State Park Commission
   Otto O. Beck, M.D., Birmingham, Chairman, MSMS Beaumont Memorial Fund

5. **The Future of the Beaumont Memorial**

   By Honorable W. F. Doyle
   Honorable Creighton R. Coleman, Battle Creek
   Majority Leader of Michigan Senate
   A. H. Whitaker, M.D., Detroit
   Chairman, MSMS Beaumont Memorial Restoration Committee

6. **Adjournment**

   By Chairman Jones

Professional Relationships Are Key To Public Attitude

Just a few days ago, I received a letter from one of our large insurance companies stating they were cancelling my malpractice insurance. They assured me it was no reflection on my personal or professional reputation, and they referred to a clause in the policy which read that the policy could be cancelled on thirty days' notice. Upon request for some further explanation of their action, I was told, among other things, that their loss experience with physicians' and surgeons' professional liability coverage had been developing very unfavorably since 1946, not only in this state but countrywide.

I invite this to your attention, not to judge the propriety of this action by the insurance company, but to deplore the fact that this type of legal action is becoming more prevalent. I think we physicians can do something to correct this state of affairs, if we are resolved to do so.

In the April number of the *Michigan State Bar Journal,* and the April number of THE JOURNAL MSMS, are several excellent articles dealing with medico-legal matters. Mr. Clayton C. Purdy, in his article, makes some very pertinent observations. He warns that a bad result in the care of a patient is no evidence of negligence. Yet, in ten out of twelve cases, the layman, and not too infrequently the physician himself, mistakes a bad result for conclusive evidence of negligence. It is Mr. Purdy's opinion that the thoughtless or inadvertent criticism by a physician of the work of his fellow practitioner, very likely without full knowledge of all the circumstances in the case, has been the cause of the majority of the unwarranted malpractice actions.

Young doctors of medicine of today are better trained, and it would seem that honest mistakes in practice should be occurring less, rather than more often. I believe we would do well to use our imagination and observe ourselves in what we do and say in our daily practice, and to reassess its effect on others.

It is an incontrovertible fact that malpractice suits are becoming more frequent. We should re-examine our relations with our fellow practitioners and the public and honestly strive to make them better for all concerned.

R. J. Hubbell

President, Michigan
State Medical Society

President's Message



Editorial

MICHIGAN STATE MEDICAL SOCIETY ANNUAL SESSION
Pantlind Hotel-Civic Auditorium, Grand Rapids
Wednesday-Thursday-Friday, September 23-24-25, 1953
YOU ARE URGED TO ATTEND!

"THE PRICE"

"IT IS the common fate of the indolent to see their rights become a prey to the active. The condition upon which God hath given liberty to man is eternal Vigilance; which condition if he break, servitude is at once the consequence of his crime and the punishment of his guilt." This has commonly been quoted as, "Eternal vigilance is the price of liberty."

The truth of John Philpot Curran's observation is certainly no more manifest than in the case of disease, and apparently very particularly so in that group classified as venereal. The several papers appearing in this month's JOURNAL bear reference to these infections, and while in many respects they would appear most encouraging, a possible forecast of recurrent blight can be seen. Some feeling of complacency has apparently taken form in both professional and lay minds, and it appears from recent studies, as well pointed out by Doctor Cowan, that this feeling is not well founded. Much encouragement may indeed be drawn from a review of his findings; namely, that there has appeared a definite decrease in syphilis in the past ten years. Early infectious syphilis has declined. Congenital syphilis is reduced to the extent that only thirteen cases were reported in 1951. The tertiary and destroyed luetics, however, are still with us. It would appear that gonococcal infections have decreased from 5 to 10 per cent for each year since 1947. The situation as to gonorrhea undoubtedly results from the fact that more patients are treated by more physicians; whereas in 1937, a survey in Ingham County revealed that only 60 per cent of the membership treated any type of venereal disease, this percentage of physicians has largely increased because of the simplicity in therapy as regards both gonorrhea and syphilis. Thus also the period of infectivity has been greatly reduced. However, Doctor Cowan points out that unfortunately in 1952 there was the first increase in syphilis since 1947 and this increase represented a 13 per cent total over the previous year of 1951. Let us hope that this observation may not prove to be the handwriting upon the wall.

It is of further significance that for the first time in fifteen or sixteen years there has been no appropriation made by Congress for the present fiscal year as regards grants in aid in venereal disease control to any state. This pattern will necessarily curtail the Health Department activities in Michigan if it is not corrected, and does suggest that the complacency mentioned has reached the higher group of legislators. It is also noteworthy that *Venereal Disease Information* published by the United States Public Health Service was discontinued several years ago.

If these straws give the direction of the wind we may truly hope that there may not develop a tornado, and certainly this will put an added responsibility on organized medicine and the individual practicing physician. If a further increase, or continued case volume, should result, much onus might be placed upon medicine itself, and it might be suggested that medicine was not capable of controlling these infections.

Doctor Shaffer has brought to our attention the large number of undetected latent luetic cases. These are a potential social and economic drain, which Doctor Cowan has also clearly demonstrated. Certainly such programs are of extreme value in the reclamation of potential derelicts. However, as Doctor Shaffer also emphasizes, only three cases of active and infectious syphilis were discovered during and because of this survey of 41,000 serologic examinations. Therefore, the active case of early infectious syphilis can be presumed to have been discovered or brought under treatment only by the practicing physician or the clinic and this will remain our responsibility as such under any circumstances.

It is unfortunate that the uniform reporting of these communicable diseases is not an established fact, which would benefit the entire people. A

recent bill introduced into the Michigan Legislature to require such uniform reporting by all physicians was not reported out of committee in view of some medical opposition.

Doctor Wheeler's critical and searching report of one of the new diagnostic methods used in syphilis is certainly most encouraging. These studies represent tedious and painstaking work on the part of many, and offer additional hope for a rounded evaluation of the actual clinical status of the patient. It has been suggested also that T.P.I. (treponema pallidum immobilization test) may give assistance in evaluating more accurately certain cases of individuals applying for special certification under the present marriage law. Upon occasion acceleration becomes so rapid in medical research, that even newer methods or procedures are developed prior to the publication or reports of those which led to such further progress or advancement.

At the recent 1953 meeting of the Syphilis Study Section of the National Institute of Health, reports were submitted that other and possibly even more accurate modifications of this present test may be available. It is stated that these will be in the nature of a new agglutination test which should become available commercially and could be performed by all laboratories at a considerable decrease in the expense involved. These simplified tests could easily be executed by accepted serologic laboratories. It is to be hoped that such will be the case and further practical applications may be made available for each practicing physician.

Let us not forget "The Price." Let us indeed continue our vigilance and progression rather than face the tragic misfortune of possible regression, as is suggested by the very considerable increase in the case reports of syphilis in the period of the last twelve months. These diseases are truly communicable and remain distinct from the many degenerative lesions which afflict at present so many of our population. It has been well said that no communicable disease has ever been controlled or abolished by the treatment of individual cases alone, and it is to be emphasized that, at present, satisfactory immunization has not been discovered or developed for the abolition of gonorrhea or syphilis. In fact these diseases do not themselves confer immunity. Therefore, only by finding all carriers, in other words, contacts and sources of infection, may we hope to further minimize contaminations. Thus the effort necessary in this particular group of infections must be continuous and is similar to that of tuberculosis and they cannot be compared to the great number of infectious diseases which formerly afflicted our population in the early part of this century.

FOR OUR OWN AND FOR THE SAKE OF ALL—DO NOT FORGET THE PRICE.

Robert S. Breakey, M.D.

MEDICAL AND HOSPITAL ABUSES

THE MEDICAL profession is now receiving a series of attacks probably as severe and as vicious as any ever leveled in the past. We have fought the trend toward socialism for many years and seemingly have an advantage on that front. When an attacking force is stymied in one area it is apt to tackle another. The public criticism by Dr. Hawley a few months ago started an avalanche, which seems to be increasing. Newspapers throughout the nation called upon the profession to purge itself of the "unscrupulous few" who are doing unnecessary or ghost surgery, who are taking advantage of the human needs of the sick, as is charged. The leaders of the profession have admitted that there are abuses. There may have been in the past, and may be now some unethical practices, but they are difficult to pin down, and bring the culprit to accounting.

Time magazine has just published an editorial severely criticizing the House of Delegates of the American Medical Association for its action opposing section 200.9 of part 12-4 of Regulations for Maternal and Child Health and Crippled Children Program. The section reads:

"State Plans for Crippled Children's Service shall provide that the services under the plan will be made available within the area served by each diagnostic center to any child (a) without charge, (b) without restriction or requirement as to economic status of such child's family, or relatives or their legal residence, and (c) without any requirement for the referral of such child by any individual or agency."

In the reference committee it was found that "this paragraph must be in the bill because of the fact that the bureaucratic dogmatic regulations from the Children's Bureau require that no means test be used and that a state which does not submit to these regulations can have no funds allocated to it."

We submit this is *Socialized medicine.* In opposing it we are charged with "picking on Crippled Children."

The *Detroit Free Press* is now (as this editorial is being written) publishing a series of daily articles, starting Sunday, June 28, on "Detroit Hospitals and the adequacy of the treatment which those who enter them may expect." The first article in listing reasons for unsatisfactory treatment in hospitals mentioned "the unscrupulous and deliberate doctor cheat" who may get the patient, and have unlimited opportunity to gouge him. The author told of cases where over $2,000 of charges were made without the patient getting satisfactory services. The article on July 2, charged that "the profession does nothing to eliminate the cheats," and accused the House of Delegates of the American Medical Association of doing nothing. It quotes Dr. Hawley, and mentions a movement in Detroit stimulated by M.D.s to have an audit of doctor's accounts.

The medical profession in Michigan, and other states, deplores any mispractice, excessive charges, or unethical surgery, but we believe only a very small per cent are involved. Many of us who have been practicing for enough years to have seen the development of many modern practices, including surgery, have seen efforts made to control or eliminate the cheat. These men have been forced out of a medical society only to have them take up the role of martyr, and have their practice increased because of the usual sympathy to the underdog. That is a common experience. It was the belief of the professional leaders that such unworthy practitioners might be better controlled in the society than outside where they could and did pose as victims of "colleagues who were jealous." The American people like the underdog.

Most of the unworthy practitioners are easily known, and their reputations may be learned by asking the family doctor, or a good doctor friend, before getting too involved in expensive or radical services.

ACKNOWLEDGMENT

THIS number of THE JOURNAL is devoted to the problems of Venereal Diseases. In preparing it and assembling the papers, we are indebted to Robert S. Breakey, M.D., of Lansing, Councillor of the MSMS Second District. We are pleased to offer our thanks and appreciation to Dr. Breakey and his committee.

Similar testimony is due to A. Hazen Price, M.D., and James J. Lightbody, M.D., of Detroit, in assembling and supplying the papers for the Geriatrics Number in May.

HOSPITAL COSTS

JUNE 20, 1952, the Hon. Joseph A. Navarre, Michigan Commissioner of Insurance, wrote to the President of the Michigan Hospital Association asking for "a voluntary survey of practices in Michigan in order to establish the truth behind hospital finances." This request was made because the Commissioner of Insurance was specifically interested due to the fact that prepaid and insurance payments govern much of the finances of the hospitals, and are a big majority of the hospital sources of payment.

The report was just completed, May 25, 1953. Arthur Anderson & Co. made the survey. They chose ten representative hospitals who were willing to co-operate in the study. The year 1951 was chosen because it was the last complete year. The average costs to the hospital for each dollar: 61.5 cents for salaries, 14.5 for supplies, 9.3 for food and all other costs 14.7. The average paid by the week for similar services in hospitals and industry are: maintenance $51.37 against $75.69 in industry; housekeeping, hospitals, $33.52, industry, $36.00; dietary, hospital, $33.54; industries, cooks, restaurants, $75.00; administration, hospital, $47.22, industry, men $66, women $51.50.

Hospital costs per adult in-patient day have increased from $16.33 in 1947, to $24.23 in 1951. There has been an increase in the number of employes per patient due to a lessening of work hours by four to eight per week.

Many of our members, and others, have blamed the Blue Cross prepayment plan for the large number of hospital patients, and also for the increase in costs. The survey confirms the reports of Blue Cross. The average hospital stay of Blue Cross patients was 6.7 days, the non-Blue Cross, 6.9 days; the average charges per patient are: Blue Cross (6.7 days), $154.15, and non-Blue Cross (6.9 days), $145.57.

Report to Commissioner Navarre estimated that forty per cent of the patients admitted into Michigan Hospitals are covered by Blue Cross, and

(Continued on Page 910)

Michigan State Medical Society Past Presidents 1866-1874



Photographs of all past presidents of the Michigan State Medical Society have been gathered over a period of two years and are now arranged in an attractive swing-wing panel display in the Past Presidents Room of the MSMS "home" in Lansing.

In the next ten issues of THE JOURNAL of the Michigan State Medical Society, panels of Past Presidents' photographs will be published. The first photographs cover the period from 1866 through 1874.

This month's photographic record begins the year MSMS was organized, a year after Abraham Lincoln was assassinated. The period continues through the presidential administration of Andrew Jackson and into the time when Ulysses S. Grant was in the White House. In 1866 the *Detroit Review of Medicine and Pharmacy* notes: "The sphygmograph which is exciting some attention . . . is one of those ingenious instruments . . . devised of late years. . . ." In 1870, Michigan had more than 1,600 saw mills and led the nation in lumber production.

(Next month, MSMS Past Presidents from 1875 to 1885 will be featured.)

Detroit Physiological Society

MEETING OF APRIL 16, 1953

The Effect of Ultraviolet Irradiation on Normal and on Cytochrome-Deficient Yeast Strains

Caroline Raut and Alfred Bowles
Detroit Institute of Cancer Research

A deficiency in the cytochrome system in yeast and the resulting inability of the deficient cells to absorb oxygen have little or no effect on the rate at which these cells are killed by ultraviolet irradiation, as compared with the rate at which normal cells are killed. However, a large number of cytochrome deficient colonies appear among the survivors following irradiation of normal cells. This deficiency is heritable in that it is transmitted from one cell generation to the next, but genetic tests show that it is not caused by a gene mutation. It is suggested that the radiation acts by altering some non-genic autoreproducible particles required for the production of the complete cytochrome system.

MEETING OF MAY 21, 1953

The Role of Antimetabolites in Nutrition

O. D. Bird
Parke, Davis & Company

Following the demonstration in 1939 that yeast extract counteracted the bacteriostatic effect of sulfonamides on microorganisms *in vitro,* it was soon discovered that the active substance causing this counteraction was p-aminobenzoic acid (PAB). PAB was postulated to be a metabolite necessary for normal cellular activity and it was thought that its function was interfered with by the structurally related sulfonamides which displaced it in important enzyme systems. A general theory was proposed which attempted to explain the action of antimetabolites as being due to their structural similarity to metabolites required by organisms.

Since the vitamins were the most obvious metabolites, many analogs of them have been synthesized with the expectation that their use in the animal body would affect in a desirable fashion the metabolism of either invading microorganisms or the host. These compounds have been largely unsuccessful because the nutrition of the host, who needs vitamins as do the microorganisms, is often seriously impaired. This does not apply to the sulfonamides since they act on the metabolite PAB, which is necessary in the metabolism of microorganisms but not in that of higher animals.

One or more antagonists for each of the water-soluble vitamins (except biotin) and also vitamins E and K have been found active in animals as measured by the production of the respective vitamin deficiency. Competitive inhibitors of thiamine, riboflavin, and pantothenic acid in animals have been synthesized. Certain of the inhibitors of folic acid, which have found some clinical use in the noninfectious disease, leukemia, are so potent and irreversible that they cause the death of animals in a few days. Inhibitors of the other vitamins have not been shown to be especially specific and there is some question whether they act directly through nutritional mechanisms involving the vitamin to which they were intended to be related.

Annual Reports

ANNUAL REPORT OF THE COUNCIL—1952-53

The Council had three sessions totaling seven days and the Executive Committee of The Council convened nine days (to September 20, 1953), a total of twelve meetings up to the 1953 Annual Session of the Michigan State Medical Society. This represents a total of 116 hours of deliberations—equivalent to 14½ days on an eight hour working basis—and not including additional generous time necessarily spent going to and returning from meetings of The Council and of its Executive Committee held in various parts of the State.

The astonishing-high number of 1,013 items was considered at the dozen meetings of the past year. All matters studied and recommendations made by The Council's thirty-one Committees as well as by the Society's twenty Committees, and all business of the Society, were referred to The Council or its Executive Committee for consideration and action.

Membership

Membership as of June 30 and as of December 31, from 1935 to 1953, as indicated in the following chart:

	1953	1952	1950	1945	1940	1935
June 30	4,977	4,776	4,881	4,425	4,401	3,410
December 31		5,337	5,114	4,686	4,527	3,653

The figures for 1953 include 4,633 Active Members, 154 Emeritus and Life Members, 16 Retired Members, and 174 Associate and Military Members.

Finances

As in the past, the first item of new business on the monthly agenda of The Council or its Executive Committee is "Study of Monthly Financial Reports." Every thirty days, therefore, the Society's financial picture is reviewed and governing policies established. In addition, the Finance Committee meets periodically (four times during the past year) to study and to advise The Council on particular fiscal questions.

The auditor's report for 1952 plus the budgets of the Society for 1953 were published in JMSMS, March Number, beginning on page 317. Members are invited to acquaint themselves with the financial status of their State Medical Society and to offer suggestions; these always are truly appreciated. As of June 30, 1953, 4,633 members paid Society dues amounting to $92,290.00. This was on the basis of $20.00 per member allocated to the General Fund as established by The Council in January, 1953, and includes some payments by new members of portions of a year. An equal amount accrued to the Public Education Account for current activities, and $9,229.11 was set aside in a Building Fund as well as $6,291.70 in a contingent surplus fund. A brief financial résumé of each of the MSMS activities as of June 30, 1953, is herewith presented:

Financial Report for Period Ending June 30, 1953

ACCOUNT	On Hand 1/1/53	Income to 7/1/53	Expenses to 7/1/53	Balance on Hand 7/1/53
General Fund	$ 66,256.15	$ 93,713.49	$ 47,611.75	$112,357.89
Annual Session		24,537.93	3,119.63	21,418.30
Michigan Clinical Institute		11,850.00	8,318.35	3,531.65
The Journal		32,550.73	25,133.07	7,417.66
Public Education	30,482.34	92,891.00	37,959.57	85,413.77
Public Education Reserve	30,000.00			30,000.00
Rheumatic Fever Control	15,863.57	7,694.16	14,087.65	9,470.08
Surplus from Dues	14,369.09	6,951.33		21,320.42
Building Fund	10,643.82	9,268.60	3,024.09	16,888.33
Beaumont Memorial	26,251.85	3,494.49	21,612.10	8,134.24
TOTALS	$193,866.82	$282,951.73	$160,866.21	$315,952.34

The AMA dues collected by county medical societies and forwarded to MSMS and then to the American Medical Association during the six months to June 30, 1953 totaled $112,837.50. The very high percentage of American Medical Association dues being paid by MSMS members (97.9%) is to be noted; The Council feels that the members of our State Society are to be congratulated on their tangible co-operation with and support of the American Medical Association. A résumé of the financial condition of the Michigan State Medical Society as of August 31, 1953 will be presented to the House of Delegates at its opening session of September 21, 1953—as a part of the Council's Supplemental Report. Thus far in 1953, $57,433.57 of the funds of the Michigan State Medical Society have been invested in short term government securities. These funds are invested during the early part of the year when income is high resulting from dues payments and thus earns interest for the MSMS rather than having the funds remain idle in a commercial account. These securities mature later in the year when income is low and expenses continue at the regular rate. Any securities maturing, the funds from which are not immediately required, will be reinvested upon the advice of the Finance Committee.

The Journal

The Journal of the Michigan State Medical Society was established and the first issue published by The Council in September, 1902, with Andrew P. Biddle, M.D., as Editor. The Journal has been published monthly ever since under the direction of the Publication Committee. The June, 1953 Number now in the process of being printed will be Number 610. The Journal has always been primarily a "house organ," publishing scientific papers, reports, book reviews, news items, biographical data, and especially socio-economic items which have a direct bearing on the practice of medicine in our state.

The Editor has collected items of general interest, items of news value, and has particularly attempted to present the objectives and ideals of the State Medical Society and its members. The editorial policy has been moral and economic rather than scientific. The selection of original papers has been an attempt to foster and promote the scientific leadership and progressive research of our members. During the years many ideas have been advanced and followed through to successful adoption. Michigan has been a leader in advanced thought and new procedures, all of which have been supported and stimulated by The Journal.

During and since the war, The Journals have necessarily been late, and special effort to catch up to the date line has given us five in succession on time this year. We slipped in May, and were one week late. We hope to retrieve our record, and have the succeeding numbers on time.

The expense of publication has steadily increased. The number of pages per year has not varied too much, being a constantly increasing figure because of the political threat, and the necessity of publishing more and more articles dealing with our socio-economic and political problems. We believe we have had a considerable success. This present year we are attempting to hold the number of pages down somewhat and at the same time to advance our aims and our scientific standing.

We have devoted much space and material to the fight against the socializing of medicine, and believe we have had a worthwhile part in preserving our independence and private practice. Reports have been printed of

the actions and objectives of the socializers. Also the belief and position of the profession has been given sufficient detail to keep our members posted.

For the past several years, each issue of THE JOURNAL has been especially devoted to some function or sponsored objective of the Society. The covers of those JOURNALS have been designed with a hope of furthering the subject matter. We have not had two covers alike for many years. A collection of the covers alone makes an interesting history of the Society and THE JOURNAL. Advertising on first cover page has been repeatedly sought by a large pharmaceutical manufacturer, but we have believed our membership would be better served with our own kind of stimulus, calling attention to an activity of some of our very hard working groups. So far this year we have had the following content and cover emphasis: heart, Beaumont, cancer, medico-legal (a joint project with the State Bar of Michigan), family physician-geriatrics, Blue Shield. July will be the Annual Session; August, venereal diseases; September, arthritis-rheumatism; October, diabetes, and the balance are well on the way too in their planning. This year we have decided to issue the Roster in a separately bound volume, to be available for the doctors' desks. When ready it will be enclosed in the mailing of the current issue of THE JOURNAL, and thus not be a cause of delay.

Many individual members have contributed to the preparation and assembling of material for our special numbers. We thank them.

Organization

1. The MSMS Public Relations Conference was held in Detroit on February 1; the second annual meeting of Michigan's County Medical Society Executive Secretaries was held in Lansing on February 24; the Annual County Secretaries Conference followed in Lansing on February 25. Attendance at the Public Relations Conference and at the County Secretaries Conference suffered from dividing what was for years a joint meeting. The Council will present them again as a joint meeting next January in Detroit.

2. The Seventh Michigan Clinical Institute was held in Detroit, March 11-12-13, 1953 with a registration of 2,283—an all-time record in total registration. However, the M.D. attendance remains static from year to year; efforts will be made to interest more MSMS members to attend the 1954 Michigan Clinical Institute where information of practical value in daily practice, with accent on clinical medicine, diagnosis and treatment, will be found. As usual the recent Michigan Clinical Institute received excellent newspaper and magazine coverage on its scientific program. Innovations: a special meeting of the Michigan Health Officers Association and the first annual conference of operating room nurses, were held coincident with the Michigan Clinical Institute.

3. The usual joint meetings of Michigan's seven Delegates to the American Medical Association were held with the Executive Committee of The Council before the June and December sessions of the American Medical Association.

4. The Student American Medical Association branches at the University of Michigan and at Wayne University again were recognized by invitations to send their representatives to the MSMS Annual Session in Detroit and by financial sponsorship of four delegates each to the Student AMA Convention in Chicago, June, 1953. MSMS continues to maintain an Advisor to each of the two Student AMA units in Michigan.

5. The 87th MSMS Annual Session of 1952 in Detroit attracted the greatest attendance in the history of the Society—a total of 3,605 including 2,163 M.D.'s.

6. Innovations at the 1953 MSMS Annual Session in Grand Rapids (September 23-24-25) include (a) A surgical "block" on Wednesday morning; (b) General Practice Day (Thursday); and (c) Creation of the Beaumont Memorial Lecture (Friday), all indicative of The Council's efforts to maintain the MSMS Annual Session as the outstanding event of its kind among state medical associations.

Recognition of the high scientific standing of our Annual Session comes in the recent request of a leading pharmaceutical house to include MSMS Annual Session in its "Ciba Reports," an honor reserved for only outstanding national and state meetings.

7. Michigan Medical leadership continues to be recognized by the election of two MSMS members, annually for the past three years, as presidents of national societies. This year C. C. Sturgis, M.D., Ann Arbor was chosen to head the American College of Physicians; and J. M. Sheldon, M.D., Ann Arbor, was elected as chief of the American College of Allergists.

8. Cancer. Twenty-five Michigan men, including nine doctors of medicine, visited the Memorial Center for Cancer and Allied Diseases in New York City as the guests of James Gerity, Jr., an industrialist of Adrian, on April 23, 1953. The doctors selected had been identified many years with cancer treatment. A vote of sincere thanks was expressed to Mr. Gerity by the Executive Committee of The Council for his interest in cancer research and control and his tangible contribution to cancer education.

Recognition for outstanding service in cancer control and educational work was extended during the past year to H. M. Nelson, M.D., Detroit, President of the American Cancer Society; N. F. Miller, M.D., Ann Arbor; and to Frank L. Rector, M.D., Lansing, all of whom received scrolls from the Michigan State Medical Society.

9. Industrial Medicine. Recognition was accorded E. A. Irvin, M.D., Detroit, President of the Industrial Medical Association, who received an MSMS scroll during the Michigan Clinical Institute.

10. Organization among the fifty-five component county societies covering all of Michigan is being maintained to a satisfactory degree. The Council again expresses grateful and sincere appreciation to those county societies which sponsor annual scientific postgraduate "clinic days." These high quality training programs are excellent aids to the continuing education of our members.

Public Relations

The year just completed has been a crucial one for the medical profession. With the establishment of a new administration in Washington, which has indicated an understanding of the medical profession's problems, the doctors of medicine of Michigan and the United States have been thrust into a position of leadership and are "on trial" in the eyes of the people. MSMS has recognized its responsibilities. It has and will continue to work vigorously in Michigan and to contribute generously to the national effort by attendance at national gatherings and service on AMA Commissions and Committees.

Never before has public relations assumed such tremendous importance in the medical profession as now and in the years ahead. The doctors of medicine have been given the opportunity by the vote of the people to function in an economy and a society with fewer direct threats of controls and harassment from Washington. Now the doctors of medicine must prove that they can find the answer to socio-economic problems without resorting to government controlled socialized medicine. Only through the astute practice of public relations by individual doctors of medicine and associations can the profession *prove* to the people the facts presented to them during the fight against national compulsory health insurance.

This is the time to increase personal and professional public relations efforts, i.e. *to make more friends for medicine.* That effort has just begun. As long as the medical profession is in the role of leadership and as long as it has a commodity and status which no other profession has there will be those groups, organizations, and

individuals who will constantly endeavor to make inroads into an area properly belonging to the medical profession. Also, attacks based on lack of understanding are being made in many quarters by persons and periodicals that are in agreement with the basic philosophies of American medicine. Only you and friends who *understand* you and your practice can halt these inroads and stem the attacks.

During 1952-53 the Public Relations program has been geared to meet emergency situations of a professional nature. In November the Bay City doctors of medicine had to wage a campaign against the attempt of osteopaths to control Bay City General Hospital. Organizing themselves into a committee called the Voters Hospital Committee, the Bay City M.D.'s were able with the assistance of Medical Assistants, Woman's Auxiliary and many friends of medicine to convince the voters of Bay City that osteopaths did not have sufficient training and qualifications to enter an area of medical science and treatment. The voters defeated the proposal which had been placed on the ballot in the November, 1952 election by a vote of 14,526 "no" and 5,633 "yes." The effect of this one-sided victory was heartening to doctors of medicine all over Michigan and had a national effect for it served as a "test case" and was an object of review by many other states and cities.

The past year has been one of alertness in public relations against the various threats to the medical profession in the form of attitudes, legislation, and governmental administration, and an immediate, effective response to emergencies ranging from presentations before the Committee on The Nation's Health to regulations of the Basic Science Board and various and sundry other anti-medical legislative attempts. Media available to MSMS was utilized judiciously for the purposes of education. The Public Relations Conference in Detroit on February 1 informed MSMS members on effective use of communication media and discussed public relations policies.

Newspapers, magazines, publications: During the course of the year an estimated 8,000 news releases were sent to the Michigan daily and weekly newspapers to publicize medical meetings and special events (such as the Beaumont Memorial.) The magazine *INSIDE MICHIGAN* devoted a two-page photographic spread of the 1952 MSMS Annual Session in its November issue. The magazine also published a "Voter's Guide" during the November election campaign and a total of 40,000 copies of the "Voter's Guide" were distributed by MSMS and the Woman's Auxiliary. The brochure "In Planning Your Career" continued in great popularity, a reprinting of 10,000 was necessitated, and in addition to wide national distribution a total of 1,000 copies of the brochure were placed with the Detroit Historical Society for career counselling. Articles on public relations appeared in THE JOURNAL, MSMS, *Journal,* AMA and *Student Journal,* AMA. The many fine pamphlets prepared by the American Medical Association were distributed through the offices of MSMS members.

Television: After 80 broadcasts the popular program "Medical Mailbox" on WXYZ-TV, Detroit, was halted March 20, 1953, as the program had served its purpose. New plans are being developed for television production which will be offered for use by all of Michigan's television stations. In the meantime, 53 doctors of medicine were placed on the "Court of Health" television program of the Michigan Health Council.

Radio: "Tell Me, Doctor" was discontinued as a formal program on December 31, 1952, after it was determined that the highly informative five-minute, authentic health program had lost audience appeal in certain areas. In the time that the program was in being, more than 1,600 programs were produced. However, the program is still popular in certain areas and arrangements were made for re-using previous transcriptions to make the program available as requested. Other special broadcasts were made during the year as well as at the Michigan Clinical Institute, and the Annual Session. At the latter, included among several other radio presentations, was a dramatic presentation on Radio Station WWJ, Detroit, "The Strange Patient of Doctor Beaumont."

Cinema: The three MSMS motion pictures, "To Your Health," "Lucky Junior" and "To Save Your Life," continued to receive wide distribution in 1953. The audience for these motion pictures has been estimated conservatively at about one and one-half million. Other motion pictures have been produced on medical subjects in co-operation with voluntary health agencies, such as the film "New Hope for Hearts" of the Michigan Heart Association, and have been made available for distribution by medical societies. A film on medical associates is being developed now and negotiations are in process for the sponsorship of a film on the Personal Health Appraisal by a national drug firm.

Exhibits: MSMS will again exhibit at the Michigan State Fair in August, 1953, assisted by the Woman's Auxiliary. Last year 90,000 pieces of literature were distributed, and about that same quantity will be used this year. A new exhibit produced by the Michigan State Medical Society was introduced at the 1953 Michigan Clinical Institute. This exhibit features a shadow box for display of sound motion pictures and is so constructed that different themes may be used as desired. The theme at the Michigan Clinical Institute exhibit was Medical Associates.

Adult Education: The adult education program was continued in schools around Michigan. A total of six county medical societies presented courses in seven Michigan communities.

Liaison with Voluntary Health Agencies: In other areas the public relations program of the Michigan State Medical Society continued its alertness and presented positive programs in co-operation with the various committees of the MSMS as well as maintaining liaison with all allied health organizations and many lay groups interested in health.

Interim Advisory Committee to the Public Relations Counsel: To maintain a flexibility for immediate and long-range action in public relations, this Special Committee was appointed. Members of the Committee advise the Public Relations Counsel on many matters including the subject of the sub-standard healing arts and cults. This Committee also served as the nominating committee to select Mr. Dwight Jarrell and Mr. A. DeWitt Brewer to replace Mr. Daniel Ford and Mr. John Kantner (both resigned) as Public Relations Field Secretary and Associate Public Relations Counsel respectively.

Committee on Awards: During the year, several awards were made by the Michigan State Medical Society to those persons who had made outstanding contributions in the field of health. One such award was to Michigan's Foremost Family Physician—Sherman L. Loupee, M.D., of Dowagiac—who had served many years in the cause of the medical profession. Dr. Loupee was also honored by a concurrent resolution passed by the 1953 Michigan Legislature. Members of the Committee are: L. Fernald Foster, M.D., Chairman; Wilfrid Haughey, M.D., and L. W. Hull, M.D.

Rural Medical Service: A shortened version of the Michigan Health Survey entitled "Health in Michigan" was issued by Michigan State College. This publication was thoroughly reviewed by the Committee.

Perhaps one of the finest efforts for better public relations was begun by the Committee in its advisory capacity to the "M.D. Placement Program" of the Michigan Health Council.

Outstanding this year also was the Michigan Rural Health Conference held on January 15-16 featuring George Bond, M.D., as the top "name" speaker, many MSMS members participated.

Personal Contact: The Public Relations staff continued its effective routine of visiting local medical society leaders, obtaining from them recommendations for improvement of the Michigan State Medical Society and assisting them in local problems and emergencies.

Legislation: Elsewhere a review of legislation gives the highlights of the success of that program both in Michigan and in the United States. Fortunately the MSMS had developed in advance through its public relations activities the information and personal contacts necessary to be of maximum help to the Legislature at the most critical moments. It was the timeliness of this assistance based on adequate advance preparation and experienced counsel that made the difference between success and failure. Recognition has rightfully been accorded to the medical profession for its effort in respect to the reapportionment campaign, the medical examiner bill, the fight against cultism, etc.

Individual Responsibility for Friendly Vigilance: Medicine needs friends who *understand* medical practice. There are many people who are in agreement with the basic philosophies of American medicine (among these are newspaper and radio writers), but who honestly believe some of the untruthful charges being made against medicine. Quietly and sincerely these misunderstandings must be resolved promptly whenever evidence of them occurs. This cannot be accomplished solely by official representatives of organized medicine. *It can be gained only by an eternal vigilance and a sense of personal responsibility on the part of every doctor of medicine.* It is an incontestable fact that groundwork in good public relations was laid by information flowing through written and personal contacts with congressmen and legislators. This did much to insure the ultimate success of our legislative effort. So, too, can information given by individual doctors to friends—imparted in prompt and friendly fashion—fill in the gaps of public understanding. This will go far toward greater success in medical public relations.

A recommendation on this subject follows.

Woman's Auxiliary

Of vital importance to MSMS is its Woman's Auxiliary which this year was headed by Mrs. William G. Mackersie of Detroit. The State and County Medical Society Auxiliaries have rallied strongly at every call and of great value was their assistance in the reapportionment campaign, the get-out-the-vote program, and the distribution of the "Voter's Guide" as part of a know-your-government program.

In local campaigns such as the hospital issue in Bay City, the ladies were of great assistance. To better understand legislation of Michigan, the Ingham County Woman's Auxiliary entertained the wives of legislators and state officials at a tea held in their honor.

A broad civic and health betterment program was developed and carried out in efficient fashion on both state and county levels by the Auxiliary. Our congratulations are due and payable to our Woman's Auxiliary.

Michigan State Medical Assistants Society

The Michigan State Medical Assistants Society has grown to 414 members adding this year a new group of 46 members in Genesee County. The upper peninsula assistants are the latest group to organize a Chapter. Each local organization has developed special projects and preliminary work has proceeded towards the activation of an adult education program for medical associates. Recognition is due this youthful organization for its enthusiasm and the highly ethical nature of its work. Mrs. Elizabeth Peck of Detroit acted as President of the Michigan State Medical Assistants Society during the past year.

Contacts with Governmental Agencies

Contacts with federal, state, and local governmental agencies continue to increase and to be an important activity of MSMS. Chief among these contacts during the past year were:

1. Michigan Day in Washington, D. C. Representatives again were dispatched to Washington, D. C., on April 28, 1953 on the occasion of this annual pilgrimage sponsored by the U. S. Chamber of Commerce and pursuant to instruction of the 1952 House of Delegates. These personal contacts with our friends in Washington, D. C., result in continually increasing goodwill.

A recommendation on this subject follows.

2. Michigan Department of Health. During the past year the State Health Commissioner was invited to all meetings of The Council and of its Executive Committee to present and discuss plans and problems of mutual interest.

Attempts to obtain legislation for the compulsory reporting of cancer and of venereal disease on the basis of "positive or doubtful" serologic tests were opposed by MSMS, and failed.

3. The Michigan Crippled Children Commission and its Medical Director, Carleton Dean, M.D., maintained a spirit of excellent co-operation with MSMS during 1953.

4. Cordial relations continue to exist between MSMS and the Michigan Social Welfare Commission headed by L. G. Christian, M.D., Lansing, and administered by Wm. J. Maxey. MSMS representatives are on the Medical Advisory Committee to the State Social Welfare Commission (a committee of the Commission.) Appreciation to Mr. Maxey and his staff was expressed by the Executive Committee during the past year for (a) help in developing a form for release of a physician from liability for divulging confidential communications; and (b) an enlightening statement on "Adoptions."

5. The Michigan Insurance Department and its Commissioner, Joseph A. Navarre, continue to maintain excellent co-operation and judgment in matters touching administration of Blue Cross-Blue Shield.

6. The Michigan Attorney General rendered an important opinion (No. 1645) on April 22, 1953 to the effect that the practice of psychotherapeutics constitutes the practice of medicine within the meaning of the statute prohibiting the practice of medicine without a license. (Opinion published in June JMSMS, page 576.) During the past year, this subject had been under consideration by the MSMS Mental Hygiene Committee.

7. Veterans Administration Hospital care for Michigan veterans. On the suggestion of Robert F. Steadman, Controller of the Department of Administration of the State of Michigan, the Governor appointed William Bromme, M.D., Detroit, to the Michigan Veterans Hospital Committee. Several meetings were attended including one open hearing in Lansing before the majority of Michigan's Washington legislative representatives in an endeavor to secure proper federal beds for individuals with tuberculosis: President Elect L. W. Hull, M.D., and Messrs. Wm. J. Burns and H. W. Brenneman assisted in this presentation.

8. The usual number of contacts were experienced during the past year with the Michigan Department of Public Instruction (adult education program); the State Treasurer; the two medical schools in Michigan; Michigan's Selective Service Headquarters; the Michigan Advisory Hospital Council; the Governor's Commission on Problems of the Aging; the Governor's Commission on

Alcoholism; Veterans Trust Fund; Michigan Civil Defense; the Governor's Office concerning appointments to various Boards and Commissions touching the practice of medicine; the Michigan Mental Health Commission; and the Michigan State Board of Registration in Medicine.

Contacts with Voluntary Agencies and Organizations

1. Blue Shield. Michigan Medical Service has had the most successful year (1952) in its 13 years' experience. The annual résumé to the MSMS membership was presented in THE JOURNAL MSMS, June, 1953, Number (page 640 et seq.). The professional relations staff of Michigan Medical Service, with the advice and guidance of an MSMS Liaison Committee (headed by Council Chairman William Bromme, M.D.), continues to forward the good professional relations of the Michigan Blue Shield plan and to remain a striking model for other Blue Shield Plans throughout the United States to emulate. However, overutilization is a serious threat to the future stability of the whole Blue Shield program. The Michigan Plan, sponsored in 1939 by MSMS, is now in excellent financial condition. But if the grave dangers inherent in overutilization of Michigan Medical Service are not explained to every physician and subscriber and unless this abuse is corrected immediately, our important bulwark against socialized medicine will be weakened and ultimately destroyed. A start in this program of information will be made in Grand Rapids on September 24 at a breakfast to which all MSMS members are invited.

A recommendation on this subject follows.

The annual financial reports of Michigan Medical Service will be submitted to its members at their annual meeting of Tuesday, September 22 1953, at 2:00 p.m. in the Ballroom of the Pantlind Hotel, Grand Rapids. MMS President R. L. Novy, M.D., Detroit, urges all delegates to be present at this session, as MSMS delegates are members of Michigan Medical Service.

2. Blue Cross. An MSMS Advisory Committee to Michigan Hospital Service has held numerous meetings since its creation on August 17, 1952. This Committee was created at the request of Michigan Hospital Service. The Council commends the Committee on the orderly compilation of the material gathered in its studies to date and the judicious conclusions derived therefrom. The Council recommends that this report be read to the House of Delegates.

3. Michigan Heart Association. A spirit of excellent co-operation was maintained between MSMS and the Michigan Heart Association during 1953. MSMS continues to be grateful to the Michigan Heart Association for its generous grants which maintain the Michigan Rheumatic Fever Control program, a life-saving enterprise with sixteen Centers active throughout the State.

4. Michigan Health Council. As of January 1, 1953, this organization assumed the responsibility of the M.D. Placement Bureau. The Health Council continues to motivate the successful Michigan Rural Health Conference.

The Health Council now has 35 member organizations and 39 associated community health councils. The Michigan Health Council's increased scope of activity and its stimulation of community health leadership justify the continued confidence of the Michigan State Medical Society.

The Michigan Health Council is endeavoring to qualify under Section 1016 of the Revenue Act re educational, scientific, etc., institutions; if successful, the Health Council will be eligible to receive grants from foundations and like agencies and organizations.

5. Michigan Foundation for Medical and Health Education, Inc. The revolving fund of the Foundation is aiding more residents, interns and senior medical students to insure completion of their medical education—on the proviso that they will practice for at least three years in a rural area of Michigan. The Foundation is now sponsoring the Biddle Lecture at the MSMS Annual Session and the Foundation Lecture during the Michigan Clinical Institute.

6. American Medical Association. Appreciation for the continued educational work the AMA is doing for the people of the United States, again is expressed by the MSMS Council. Especially to be recommended to every MSMS member is the good work of the American Medical Education Foundation.

A recommendation on this subject follows.

7. Upon invitation, MSMS representatives were dispatched to cover the following meetings of voluntary agencies and organizations during the past year: National Health Council, N.Y.C., March 17-18-19; Michigan State Nurses Association Conference on Improvement of Nursing Service (three workshops, in Detroit, Grand Rapids and Kalamazoo) and its Study of Nursing Needs in Michigan; Michigan Division of the National Foundation for Infantile Paralysis, Lansing, October 31; Michigan Welfare Conference, Detroit, November 12; American Medical Education Foundation Annual Meeting, Chicago, January 25; Fourth Conference on Physicians and Schools, Highland Park, Illinois, September 30-Oct. 2; Michigan Welfare League Conference, Lansing, April 18; National Conference on Trichinosis, Chicago, December 15-16; American College of Pathologists, Chicago, October 12-16; 1952 Congress on Industrial Health, Chicago, January 20-22; 1953 Conference on Aging, Ann Arbor, July 24-26; Commission on Financing of Hospital Care (workshop), Chicago, April 24-25; Associated States Postgraduate Committees, New York, June 1; and the United Health and Welfare Fund Budget Conference, Ann Arbor, May 21-22. The Council wishes to express thanks to all members who sacrificed time and effort in attending these Conferences as official representatives of MSMS; the public relations value of these contacts is incalculable.

8. Medical examiner law. After 13 years, a medical examiner bill was given favorable consideration by the 1953 Michigan Legislature and by the Governor. This progressive measure was drafted through the joint thinking of the Michigan Pathological Society, the State Bar of Michigan, the Michigan Association of Police Chiefs, the Michigan Prosecuting Attorneys Association, the Michigan Municipal League, and the Michigan State Medical Society. It marks a milestone of progress in Michigan.

9. Other voluntary groups with which MSMS has been in contact during 1952-53 include the Michigan Epilepsy Center, Inc.; Michigan Diabetes Association; Michigan Chapter of Arthritis and Rheumatism Foundation; State Bar of Michigan (whose Medical Jurisprudence Committee contains two representatives of the State Society); Michigan Public Health Association; the Michigan Public Health Officers Association; Michigan Tuberculosis Association; Michigan Hospital Association; Michigan Federation of Women's Clubs; Girlstown Foundation; Detroit Hospital Trustees Association; United Cerebral Palsy Association; University of Michigan; Wayne University; Michigan State College; American Cancer Society, Michigan Division and Southeastern Michigan Division; the four veterans organizations in Michigan: the American Legion, Veterans of Foreign Wars of the United States, AMVETS and the Disabled American Veterans; the Kellogg Foundation; and numerous and important business and industrial corporations.

During the past year, MSMS was invited to become a member of the Michigan State Traffic Safety Federation and of the National Society for Medical Research.

The Michigan Branch of the American Academy of Pediatrics on March 12 endorsed the Michigan Rheumatic Fever Control Program, sponsored by MSMS and by the Michigan Heart Association.

Society Home

As of July 27, 1953, the MSMS "Home" at 606 Townsend St., Lansing, had been in use two years; the higher efficiency of the executive staff—not to mention the increasing value of the real estate—has fully justified the purchase of this Lansing property.

To keep the building in Class A condition, a new boiler was installed on October 17, 1952; a black-topped parking lot on the Hillsdale Street side of the property is now being completed; and the remodeling of the front entrance to attain more dignity and to add a reception room has been authorized; cabinets for the transcription and film library of the public relations department were installed during the past year. The Past Presidents' Room now contains photographs of all the fifty-one Past Presidents of the Michigan State Medical Society, 1866 to 1953, displayed on multiplex swing-wing panels. In addition, the Dean Cornwell painting of "Beaumont and St. Martin" the gift to MSMS of Wyeth, Inc., of Philadelphia, rests temporarily over the mantle in the Past Presidents' Room; the picture will be moved to its permanent abode in the Beaumont Memorial on Mackinac Island, when it is dedicated.

During the past year, a salary schedule including small automatic semiannual increases was made effective for the office personnel below executive status. As a result, the employes are happier and the turnover is lessened.

Beaumont Memorial Restoration

Work on the Beaumont Memorial at Mackinac Island began March 25, 1953, and the exterior of the building was completed in July. The cornerstone laying was a memorable event of July 17, 1953. The dedication, upon completion of the interior and furnishing of the building, will be held at Mackinac Island on Saturday, July 17, 1954. This shrine to Dr. Beaumont is the tangible result of individual contributions from members of the Michigan State Medical Society, to whom The Council expresses deep appreciation and gratitude. The Beaumont Memorial will stand for decades as a symbol to the honor and respect which Michigan medical men pay to their scientific Great.

Erection of the building has depleted the funds contributed to date by MSMS members. Additional monies are needed to defray costs of the furnishings (to be installed before dedication in 1954), to purchase small parcels of land adjoining the Beaumont Memorial in order to give it a proper setting, and to pay the expense of necessary landscaping.

A recommendation on this subject follows.

Committees

A total of 95 meetings of Committees of the MSMS and of The Council were held during the past year (up to September 20, 1953). The impressive progress of the Michigan State Medical Society is due in the main to these active groups—their annual reports are worthy of careful perusal and consideration. The Council expresses sincere gratitude to the chairmen and to the members of all Committees for their contribution of invaluable time and sincere effort given in behalf of *all* the medical men and of the public of Michigan.

Committees especially active during the past year include: (a) the Legislative Committee which laid the groundwork for a most successful program in health legislation (see worthy report of this Committee in Handbook for Delegates); (b) Mental Hygiene Committee; (c) Study Committee on Basic Science Act; (d) Rheumatic Fever Control Committee; (e) Cancer Control Committee, which during the past year filled scores of orders for its outstanding booklet "The Story of Cancer in High Schools"; (f) Rural Medical Service Committee; (g) Arbitration Committee; (h) Emergency Medical Service Committee; (i) Child Welfare Committee; (j) Maternal Health Committee; and (k) the Committee on Scientific Work which arranged the outstanding program for the 1953 Annual Session.

Matters Referred to The Council by the 1952 House of Delegates

1. *Resolutions re Fees for Surgical Assistants.* Three resolutions presented to the 1952 House of Delegates were referred to The Council "with the recommendation that a study committee be formed by The Council to investigate the problems brought up by these three resolutions, and report back at the next annual meeting of the House of Delegates." A Committee headed by B. M. Harris, M.D., of Ypsilanti was appointed by The Council. The report of this Committee will be found in the Handbook for Delegates and is respectfully referred to the 1953 House of Delegates with no recommendations from The Council. (Provided The Council in July, 1953, does not make any recommendations.)

2. *Resolution re Basic Science Study Committee.* The 1952 House of Delegates instructed The Council to delegate to a Basic Science Study Committee the responsibility of studying the Basic Science Act with particular reference to the effect of the amendments enacted by the 1952 Legislature . . . and to report its findings to the House of Delegates during the 1953 Session. The Council Chairman sought suggestions from members of The Council for the personnel of this Committee, with two names to be sent from each District, one for and one against Basic Science repeal (as per the stipulation in the House of Delegates Reference Committee report). The Committee formed ultimately was an attempt to follow out this House of Delegates' stipulation, although it was exceedingly difficult to obtain commitments by members recognizably opposed to Basic Science.

Under the vigorous chairmanship of C. E. Umphrey, M.D., Detroit, this Committee made a thorough and painstaking survey of the subject.

The report of this Committee will be found in the Handbook for Delegates.

3. *Resolution re Simplified Insurance Reporting Forms.* The 1952 House of Delegates instructed The Council "to implement in whatever fashion necessary the action of the 1950 House of Delegates and arrange for preparation and distribution to the members of MSMS of a simplified insurance reporting form which satisfies the intent of the resolution enacted in 1950." Contact in person was made with AMA officials by Secretary Foster who on November 7, 1952, was advised that a resolution on this subject had been introduced into the AMA House of Delegates by R. L. Novy, M.D., Detroit, at the 1951 AMA Annual Session. The Reference Committee invited attention to the fact that certain simplified insurance reporting forms already had been approved by the AMA Council on Medical Service which had been requested to supply each constituent state society with copies of three simplified forms—a general mailing being made August 17, 1951, which included a copy of each of these forms:

(1) Attending physician's statement—accident.
(2) Attending physician's statement—sickness.
(3) Individual hospital insurance report.

Four other enclosures were sent in this communication:

(4) Group hospital insurance report.
(5) Attending physician's statement—group accident and sickness claim.
(6) Physician's statement—group surgical expense claim.
(7) Supplementary report of attending physician—group accident and sickness claim.
(Copies are being made available to the members of the 1953 Reference Committee.)

Although these last four were not approved officially by any organization, they represented efforts made by the A.M.A. Council on Medical Service to simplify report forms in the accident and health insurance field

where companies seek medical and hospital information to assist in auditing claims.

In reporting to MSMS, the A.M.A. desired to know the type or types of insurance which may have induced the resolutions adopted by the 1952 MSMS House of Delegates. Should it be accident and health, the matter could be presented formally to the Health and Accident Underwriters Conference or to the Bureau of Personal Accident and Health Underwriters.

This report as presented by Secretary Foster was referred by The Council to Michigan's Delegates to the American Medical Association to see what it could accomplish with national health and accident insurance companies on the forms already developed by the A.M.A., with the further suggestion that the A.M.A. meet with representatives of the Health and Accident Underwriters Conference or with the Bureau of Personal Accident and Health Underwriters, or both.

The Michigan Delegates, through J. S. DeTar, M.D., introduced certain resolutions on insurance reporting forms into the A.M.A. House of Delegates at its Clinical Session of December 2-5, 1952, in Denver; subsequent to that time, the matter was brought to the attention of the A.M.A. Health Insurance Council which has advised that it has been working on the problem and that it intends to seek advice from the Association of Life Insurance Medical Directors and also from practicing members of the profession. The A.M.A. advises there are certain complicating factors: one is the hesitancy of certain insurance companies to discard supplies of the claim forms they have used traditionally, although an effort is being made to overcome this through the Health and Accident Underwriters Conference. That Conference is urging its member companies to adopt the simplified forms as readily as possible so that claim auditing and payment may be facilitated; the second complicating factor is reported to have been that some medical societies have adopted their own forms to be completed by their members. That is the status of the situation as of July 10, 1953.

4. *Resolution re expert testimony.* A bill embodying the wording of this Resolution (to amend Section 617.69, CL 1948, being Section 27.918 MSA, by adding a new Section) was drafted jointly by the Wayne County Medical Society and the Detroit Bar Association, and introduced into the 1953 Legislature. Support was given this proposal by the MSMS Legislative Committee. The bill was slated for favorable action but because the Bar Association was unable to satisfy the House Judiciary Committee concerning technical court procedures that might result upon adoption, the bill died in Committee.

The Council suggests that this proposed legislation again be introduced into the Legislature of 1954 after assurances by the Detroit Bar Association of its active co-operation in bringing necessary information to the Legislature. (See Annual Report of Legislative Committee.)

5. *Resolution re temporary licensing of qualified non-citizen doctors of medicine while in training in accredited hospitals.* This resolution, approved by the 1952 House of Delegates, was referred by The Council to the Legislative Committee which drafted a bill and presented it to the 1953 Legislature. The Council is pleased to advise that favorable consideration was received at the hands of members of the Legislature. The measure grants annual temporary licenses, renewable for not more than five years, to Canadian doctors awaiting naturalization and to other M.D.'s in Michigan who have come to the State under the Displaced Persons Act prior to January 1, 1952, and who are being naturalized. (See Annual Report of Legislative Committee.)

6. *Resolution re migratory laborers.* The 1952 House of Delegates went on record as "offering its assistance to the Governor's Committee Studying Problems of Migratory Laborers and urged the proper type of legislation be passed in the State of Michigan which would tend to alleviate this critical condition"; the House of Delegates further "instructed the proper MSMS committees to work with the groups who employ these migrant laborers in an unofficial capacity, not through the passage of laws, and try to get them to agree to do a screening job at the place in which they are hired."

MSMS Past President E. F. Sladek, M.D., Traverse City, was appointed by the Governor as a member of the Michigan Study Commission on Migratory Labor. Dr. Sladek developed a very complete report with specific recommendations to the Governor's Commission. It is evident that some persons and firms employing these workers are not accepting their full responsibility for the employes' health needs and further that the public should not be taxed to pay for the responsibilities which are being shirked by certain employers; this facet of the problem was referred to Dr. Sladek for transmittal to the Governor's Commission (see Dr. Sladek's report and recommendations, attached as an appendix to Annual Report of The Council.)

The Council respectfully invites to the attention of the House of Delegates the fact that employers and groups that hire these migrant laborers represent many hundreds of individuals, some in the United States, others in Mexico and still others in the Caribbean Islands, et cetera; the recommendation that all these employers be contacted seems impossible of performance, involving as it does the international aspects of the problem as well as tracing an impossible number of persons and firms in many parts of the Western Hemisphere.

The Council feels that E. F. Sladek, M.D., deserves congratulations for his industry so obvious in his excellent report to the Governor on this subject.

7. *Motion re legislation concerning recalcitrant tuberculous patients.* The 1952 House of Delegates instructed the Legislative Committee to co-operate with the State Health Department in the promotion of legislation to improve disciplinary measures against recalcitrant tuberculous patients. This instruction of the House of Delegates was followed.

This bill, introduced by the Michigan Health Commissioner, was favorably received by the House of Representatives. However, it met unexpected and vigorous opposition on the floor of the Senate. After numerous amendments, it failed to pass by a close vote. The popular feeling among the Senators was that the compulsory aspects of the proposal were so broad and drastic as to infringe on Constitutional rights. (See Annual Report of Legislative Committee.)

8. *The 1952 House of Delegates recommended that the Committee on Study of Health and Accident Insurance,* headed by W. S. Jones, M.D., Menominee, be authorized to continue its study of suitable health and accident policies to the end that a reasonably priced contract with adequate coverage be developed if possible for recommendation to the Michigan State Medical Society. Such a contract would not be offered as a replacement for any policies presently held by MSMS members. The Committee has held numerous meetings during the past year and, with the aid of Marsh and McLennan, insurance brokers of Chicago, has studied a contract that it feels will meet the expectations of the needs of MSMS members, at a favorable price.

The Council commends to the House of Delegates the report of this Study Committee.

Recommendations

1. That continued active and tangible co-operation with the American Medical Association and support of the American Medical Education Foundation be urged upon every MSMS member who is seriously invited to maintain and strengthen his support of the American Medical Association. Strength comes from unity and work, joined hand in hand. It flows from the roots to the trunk and thence to the branches.

2. That contributions to the Beaumont Memorial Restoration Fund—by *every individual member* of the Michigan State Medical Society—be recommended by

the House of Delegates so that the Beaumont Memorial may be presented as the gift of the Michigan medical profession to the Mackinac Island State Park Commission at the time of the dedication, July 17, 1954, in consideration of a pledge by the Mackinac Island State Park Commission to maintain the shrine in perpetuity.

The shrine to Dr. Beaumont on Mackinac Island will be an eternal memorial to the swiftly moving science of medicine and to the generosity of Michigan's practitioners of medicine. It represents the best type of public relations.

3. That MSMS representatives be instructed to continue their yearly visit to Washington, D. C., on the occasion of Michigan Day sponsored by the U. S. Chamber of Commerce.

4. That the MSMS Liaison Committee with the Basic Science Board and the Committee on Veterans Administration Hospital Plan, which Committees have been inactive or in the latter case, assumed by the Liaison Committee with Michigan Veterans Organizations, be discontinued (as these are Special Committees no amendments to By-Laws will be necessary).

5. That all component county societies give early study to their constitutions and by-laws, especially in the chapter referring to memberships to the end that all county societies have memberships analogous to those of the Michigan State Medical Society as recommended by the Special Committee on Memberships (reporting to the 1953 House of Delegates) and in accordance with the MSMS By-Laws, Chapter 1, Section 1:

> "The Charter of each component county society shall require that each of the provisions of the Constitution and By-Laws of the Michigan State Medical Society, together with each amendment to either thereof, hereafter adopted, insofar as the same is applicable, shall be an integral part of the constitution and by-laws of the component county society to which a charter is issued and shall in no way be inconsistent with the Constitution and By-Laws of the Michigan State Medical Society."

6. That all doctors of medicine, members of the Michigan State Medical Society, be alert to statements uttered or published in speeches, in editorials or otherwise which are unfavorable to medicine and that doctors of medicine, guided by their state and county societies, seek the person or persons responsible and attempt to impart truthful pertinent and factual information leading to possible public retraction of the unfavorable or untruthful statement(s).

7. In view of the findings in the first report of the Advisory Committee to Michigan Hospital Service, The Council is impressed by the dangers inherent in the improper use of the services of Blue Cross and Blue Shield. We urge the House of Delegates to permit the continued activity of the Committee and its studies in this field. The Council further proposes that county societies and hospital staffs be urged to utilize the information released by The Council on these continuing studies to the end that all parties concerned in these apparent improper uses may be restrained from continuing a practice that threatens the very existence of pre-paid medical services.

Respectfully submitted,

WILLIAM BROMME, M.D., *Chairman*
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APPENDIX TO ANNUAL REPORT OF THE COUNCIL

Statement of E. F. Sladek, M.D., Traverse City, on medical problems of the migrant worker.

To members of the Subcommittee on Health, Welfare, Housing, and Sanitation of the Michigan Study Commission of Migratory Labor:

Basic concepts regarding health and welfare of the migrant.

Michigan agriculture is constantly faced with the need for a large amount of labor for only short periods of time. It is economically impossible to employ this labor on a yearly basis. The grower MUST DEPEND upon groups of migrant workers to take care of his crops during those short periods of time. Therefore he has, or should have, a personal responsibility for his help.

Because an individual migrant worker is in a single location for only a short time, the responsibility for the impact of his personal health status on the community, possibly detrimental, is lost; by reason of the demands by the rush of work on the part of the employer, lack of interest in the personal problems of the worker, and lack of legal authority by county and state agencies to enforce minimal health standards and requirements. From a health standpoint the comparatively rapid migration from area to area of the state prevents a constant check upon the potentially dangerous migrant.

Presumably the great majority of migrant workers are in a low yearly income bracket. At certain times their comparative income is high, at others it is nil. Lack of planning, unconcern or forgetting the probability of future unemployment and periods of no income is one of the basic causes of trouble that beset the migrant. When they have money they spend it, and in many instances for nonessentials.

When in need of aid, financial or medical, most migrants cannot establish residency requirements within counties of our state. Reciprocity between counties or states for aid is almost an impossibility. Many migrants cannot even establish a state residence.

In Michigan the farm employer and farm laborer do not come under the Workmen's Compensation Act. Consequently responsibility for payment for hospital and medical care of accidental injuries occurring "on the job" does not exist except on an individual basis. Some employers carry private insurance for this purpose.

The "way of life" of the migrant family must receive consideration. By heritage they have become accustomed to a diet lacking both in quantity and in essential food elements—vitamins and minerals. Contributing factors are economic status and unfamiliarity in preparing and using available vegetables and other foods. In illness, the utter lack of previous experiences with doctors, dentists, and hospitals contributes greatly to a delay in seeking medical care, in many instances to a serious or even fatal result. Modern housing is not in their experience, nor in most instances is there knowledge of sanitation. Care of property of the employer is not within the concept of many migrants (this may be one reason why farm employers are reluctant to provide more than adequate housing).

Migratory workers are more subject to sickness and

have a higher death rate than other sections of the population. For instance, the tuberculosis rate (in California where a long-time study has been in progress) is ten times that of normal residents (this also applies to Michigan). The reasons for this greater incidence of illness are:

1. Diet deficiencies (scurvy, pellagra, rickets).
2. Unsanitary living conditions (poor housing, lack of a pure water supply, inadequate or no toilets, lack of refrigeration or other means of preserving foods.)
3. Lack of knowledge of simple health measures.
4. Lack of the use of preventive medicine techniques.
5. Inability to get early and adequate medical care.

Inability to get early and adequate medical care is the result of:

1. Lack of knowledge of the need for early medical care; not recognizing the early symptoms of serious illness.
2. Suspicion and fear of the medical man and hospital.
3. Inability to pay for private medical and hospital care.
4. Inability to get aid from county or welfare agencies due to residency requirements (very few of the local or state agencies provide free medical care to destitute persons without regard to residence status).
5. Language difficulties.

Disease conditions most frequently found amongst migrants:

1. Those that affect community health:
   (a) Tuberculosis: by direct contact or by contact through foods. Often there is an exacerbation of the disease, and consequently more dangerous, by pregnancy.
   (b) Dysenteries: Shiga baccillus, with the example of the community epidemic in the Saginaw area a few years ago. Amoebic infestation with possible communicability through food and water.
   (c) Typhoid fever.
   (d) Smallpox.
   (e) Venereal disease.
   (f) Diphtheria—Blissfield and Saginaw epidemics in 1941.
2. Those that affect the individual migrant.
   (a) All of the above.
   (b) Poor diet—and contaminated food.
   (c) Infections.
   (d) Skin diseases.
   (e) Accidents while at work.
   (f) Accidents away from work.
   (g) Surgical emergencies, including those from fights (lack of organized recreation facilities may contribute to fights).
   (h) Maternity (infant and maternal mortality is definitely increased in migrants).

In a recent bulletin from the Michigan Health Council: "Health may be defined as a state of optimal physical, mental, and social well being—not merely the absence of disease or infirmity. Primarily health is a *personal responsibility,* but it is also closely related to the family and community way of life. The effective furtherance of community health is also dependent upon the initiative, interest, aggressive support and participation by individuals and groups of the entire community. Community planning for health should be co-ordinated with planning for economic and social well being. Un-co-ordinated planning leads to and perpetuates an unrealistic separation of services."

On November 1, 1952, Mr. George Wilson, President of the California Farm Bureau Federation, speaking about the migrant laborer, said: "If there is anything worse than poverty, it is stratification." By this he meant that we can only err by making these people feel that they are a segment of society separate and apart from the rest.

R. Henry A. Randel, Chairman, Rural Health Committee, California Medical Association, states: "By making the migrants conscious that they are a select group and therefore privileged to receive bounties of society by way of tax exemptions, gratuities, and continuous free medical care is indeed a mistake. Sooner or later, and the sooner the better, these people are going to have to stand on their own two feet and be self-sufficient."

Suggestions to be considered:

1. Legislation to amend the Workmen's Compensation Act—so as to provide coverage for all farm employes, for injuries on the job. Provision for only migrant workers would probably be ruled discriminatory.

2. Legislation to provide a State Sanitary Code that requires every farm labor camp with 10 or more persons to have a State Health Department permit. This should include powers of inspection and powers of enforcement of minimal standards and additional recommendations. Minimal standards at least should include availability of pure water, adequate and safe toilets, proper garbage disposal. Some provision regarding housing might be included, but I don't see how we can legislate the type of a house a person lives in.

Adequate funds must be appropriated to employ the additional personnel to carry out the objective of this legislation.

3. A legislative appropriation to the State Department of Health for additional equipment and personnel for mobile tuberculosis screening units for mass examinations on a voluntary basis within the work areas.

The requirement of additional personnel should be sufficient to quickly process, read, and report the results of the examinations (before the migrant leaves an area and is unable to be traced).

Sufficient power should be given the County Health Officer to assure institutionalization of positive cases.

An intensive educational campaign, talks, pamphlets in Spanish and English, et cetera, would popularize the use of the units.

The function of a Department of Health is not that of furnishing actual medical care to the population, and it should not be asked to do this. Local county health officers do not have the facilities nor the associations with local hospitals to accomplish this.

4. Legislation to provide for adequate temporary relief for needy migrant farm workers. This should include (1) Elimination of residency requirements; (2) Administration on a local county level, so that investigation of actual financial need is more easily established; a matching of state and county funds might be considered for this purpose; (3) It is possible that federal grants should be sought to assist because of the interstate character of the migrant.

5. Encouragement of the purchase of prepayment medical and hospital care should be stressed.

Michigan Medical Service and Michigan Hospital Service can and are willing to cover the migrant worker with medical care insurance. Coverage would be on a month to month basis at a cost of about $11 per month per family. Maternity benefits would probably not be included, because of the number of these migrants who are not married, and secondly because those that are pregnant would be the ones to seek insurance coverage. The insurance risk would be too great.

Coverage for medical, surgical, and hospital care could be given provided: (1) A responsible party could be dealt with—government, employer, group boss, et cetera; (2) that definite identification of all persons covered would be necessary; (3) that the premium payment be made in advance.

6. That a request be made to the Michigan Health Council to consider the impact of the migrant farm worker.

The establishment of Rural Health Councils in those

areas employing migrants could prove of great benefit, particularly from the educational standpoint (there already exist many small community health councils which could be expanded into rural ones).

They could aggressively urge and stimulate:

1. The establishment of better housing for migrants.
2. Arrange for and conduct classes in nutrition and simple health measures.
3. Arrange for and conduct classes in English for the migrants on a progressive basis, area to area as the majority of workers move from crop to crop.
4. Conduct classes in Spanish (adult education) in those areas that expect to employ Mexican workers.
5. Arrange for more religious activities.
6. Set up recreation areas and playgrounds and planned recreation in the crop areas and on the fringe of towns for shopping days.
7. Set up day nursery schools.
8. Arrange for days of celebration and entertainment by the migrant (fiesta days).
9. Publish and distribute pamphlets in Spanish and English covering various subjects as health practices, care of property, local laws, et cetera.
10. Co-ordinate the activities of other groups interested in working with the migrants.

7. *That a Michigan Plan for Migrants be formulated.*

This would establish a "Michigan Migrant Workers Health and Social Fund"; a nonprofit organization, on a statewide basis, but administered and controlled at a local level. This local level could be divided on a basis of regional or crop areas.

The administrative board in each local area would consist of 2 growers, 1 hospital and 1 physician representative, 3 citizens of the community, and possibly 1 representative of the migrant workers.

The objectives would be: (1) medical and hospital care for hardship cases, both worker and family (not to supplant compensation or prepayment medical care insurance, not private payment for medical care). (2) Development of social opportunities, recreation areas and playgrounds, and of day nursery schools, with eventual financial support.

Financing:

1. So much per capita (worker)—paid by the grower.
2. Grower-worker participation—matching by grower to the payroll—for instance each pays into the fund so much per lug or pound of cherries picked.
3. On a 1 or 2 mill per pound basis. This would be paid by the canner or processor and subtracted from payment to the grower. This would probably be the surest way of collecting the donations to the fund.
4. Matching by a state legislative grant if necessary.
5. Or a combination of any of these.

As an example: In Grand Traverse County the average poundage of cherries processed is 25,000,000. A 1 mill per pound donation or dues to the Fund would amount to $25,000. If we wished worker participation, there are about 22,000 migrants in the area each year. Fifty cents a month as dues to the local Fund would amount to an additional $11,000. This $36,000 would be more than ample to cover medical and hospital costs for hardship cases. The fund would grow and eventually there would be plenty of money to cover costs and expand "social services" for the migrant.

Respectfully submitted,
E. F. Sladek, M.D.

November 20, 1952.

ANNUAL REPORT OF THE HOSPITAL RELATIONS COMMITTEE, 1952-53

No problems having arisen during the year 1952-1953, no meeting of this Committee was held.

Respectfully submitted,
L. W. Hull, M.D., *Chairman*
A. H. Kretchmar, M.D.
J. W. Logie, M.D.
C. E. Umphrey, M.D.
Ralph Wadley, M.D.

VENEREAL DISEASES—A VANISHING PROBLEM?—COWAN

(Continued from Page 848)

cidence rate of 231 per 100,000 (1945) to 117 per 100,000 (1952) leaves much to be desired.

Other criteria used to measure progress in syphilis (mortality, infant mortality, and psychoses due to syphilis) would indicate that very satisfactory results have been achieved but "no communicable disease has ever been controlled by treatment alone" is an adage in epidemiology. Moore[4] has noted that historically the venereal diseases increase rapidly in time of war or major social unrest and decline again thereafter. The 13 per cent increase in reported syphilis in 1952 may be only transitory, nevertheless it should be apparent that this is no time for complacency. Venereal disease control is rapidly becoming a problem of the private physician rather than the public clinic. This trend is good and should be encouraged. It also places a responsibility on the physician. It will be imperative for him to do more than simply diagnose and treat the patient. To break the chain of infection it will be necessary for him to see that the patient is interviewed for contacts and that these contacts are examined. He will report each case that he finds so that the venereal disease problem and control measures can be evaluated. If satisfactory progress is to be maintained, it will require his active interest and best efforts.

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Comprising the reports published in the literature to date which give specific facts and figures of the results of treatment

AUTHORS	No. of Patients	Chronic, Resistant to Other Therapy	TYPES OF ULCERS				RELIEF OF SYMPTOMS (Chiefly Pain)				Surgery or Complications[1]	Side Effects Requiring Discontinuance of Drug[2]	EVIDENCE OF HEALING			
			Duodenal	Jejunal	Stomal	Gastric	Good	Fair	Poor	No Report			Complete	Moderate	None	No Report
Grimson, Lyons, Reeves	100	100	93	7			80	11	4		5		47		19	29
Friedman	15	15	14			1	5		4	6[3]			2			13
Bechgaard, Nielsen, Bang, Gruelund, Tobiassen	26	26	21			5	16	4	6				8	6	12	
McHardy, Browne, Edwards, Marek, Ward	162		162				136	12	11		3	1	14	9	7	129
Segal, Friedman, Watson	34	34	34[4]				14	13			7	2	5		8	14
Brown, Collins	117	99	117				97	7	8		5	8	55	9	8	40
Asher	77		65		7	5	52	9	16			16		9	21	47
Rodriguez de la Vega, Reyes Diaz	5	4	5				4		1					3	2	
Winkelstein	116	116	102	8		6	102		14				53		18	45
Hall, Hornisher, Weeks	18	18	18				11		1	6[5]			18			
Maier, Meili	38	38	24			14[6]	27	7	4[7]				10	2	5	21
Meyer, Jarman	25	18	25				21		4							25
Poth, Fromm	37	37	37				33	3	1				33	3	1	
Plummer, Burke, Williams	41	41	41				36		5				38		3	
McDonough, O'Neil	104	100	104				63	10	31			11	4		11	89
Broders	60	60	58		1	1	35	19	6				10	1	49[8]	
Legerton, Texter, Ruffin	11		11				11									11
Holoubek, Holoubek, Langford	76	69	76				35	27	10		4	10	26		10	36
Ogborn	42		36	2		1	42[9]									42
Shaiken	48	48	48				33	10	3		2		33	10	3	
Johnston	145	145	145				143		2			2	143		2	
Rossett, Knox, Stephenson	146		141			5	146					4[10]	53			93
TOTALS	*1443*	*968*	*1380*	*17*	*8*	*38*	*1142*	*132*	*131*	*12*	*26*	*54*	*552*	*52*	*179*	*634*
PERCENTAGES		67.8	95.6	1.2	0.6	2.6	81.3	9.4	9.3			3.7	70.5	6.6	22.9	

1. Not included in tabulations.
2. Included in "Relief of Symptoms" as "Poor" and in "Evidence of Healing" as "None."
3. Four had no symptoms when Banthine therapy was begun.
4. Of which seven were penetrative lesions and five partially obstructive.
5. No symptoms were present in four.
6. Two with symptoms only; no demonstrable ulcer.
7. Three were psychopathic patients and one had a ventricular ulcer of the lesser curvature.
8. Roentgen findings after treatment period of two weeks; forty-seven had duodenal deformity.
9. All returned to work within a week.
10. In these four, after relief of symptoms, Banthine was discontinued because of urinary retention.

During the past three years, more than 250 references to Banthine therapy in peptic ulcer and other parasympathotonic conditions have appeared in medical literature. Of these reports, 22 have presented specific facts and figures on the results of treatment in a total of 1,443 peptic ulcer patients, 67.8 per cent of whom were reported as chronic or resistant to other therapy. These results are tabulated above and show:

"Good" relief of symptoms was obtained in 81.3 per cent of the 1,405 patients on whom reports were available.

"Complete" evidence of healing was obtained in 70.5 per cent of the 783 patients on whom reports were available.

In all but 9.3 per cent, relief of pain was "good" or "fair." In all but 22.9 per cent, evidence of healing was "complete" or "moderate."

During treatment, 26 patients required surgery or developed complications other than ulcer which required discontinuance of the drug before results could be evaluated.

Of the remaining 1,417 patients, only 3.7 per cent experienced side effects sufficiently annoying to require discontinuance of the drug.

ACCEPTED COUNCIL ON PHARMACY AND CHEMISTRY AMERICAN MEDICAL ASSOCIATION

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Michigan's Department of Health

Albert E. Heustis, M.D., Commissioner

PROGRAM OF TOPICAL APPLICATION OF FLUORIDE

For the third summer, the department is carrying on a statewide, self-supporting program of topical application of fluoride to children's teeth. The program is under the direction of the Section of Public Health Dentistry and the dental work is being done by fifteen junior dentists and twenty-two dental hygienists from the University of Michigan. Work in communities is supervised by local dentists with the co-operation of their health, school, and civic groups.

A number of purposes are served by the program. About 16,500 children will get treatments that can prevent as much as 40 per cent of new dental decay, painless treatments that will be for many of them a good introduction to dentistry. Parents and community leaders will get very practical education in dental health. The participating students will get valuable experience, including two days of intensive preparation featuring actual work with children under direction of department dentists.

The growth of the program since it was started in the summer of 1951 proves that it fills a need. In the first year there were seventeen students who treated the teeth of 5,700 children. In 1952, in response to community requests and student interest, the scope was broadened to include twenty-seven students who treated the teeth of some 11,000 boys and girls. This year the students will number thirty-seven and the children benefiting are expected to reach 16,500.

Boys and girls treated will be from three to thirteen years of age. A fee of $3 is charged, sufficient to reimburse the students for living expenses and to pay for expendable supplies. Schedules have been set up in twenty-seven counties including some 116 localities. Counties to be visited include: Allegan, Berrien, Calhoun, Cass, Chippewa, Crawford, Eaton, Grand Traverse, Huron, Ionia, Kalkaska, Leelanau, Luce, Mackinac, Macomb, Mason, Missaukee, Montcalm, Oakland, Osceola, Ottawa, Roscommon, Shiawassee, Van Buren, Washtenaw, Wayne and Wexford.

POLIO DEATHS TO BE REPORTED WEEKLY

The National Office of Vital Statistics has requested that states report the number of deaths from poliomyelitis, with county of residence, each week in their telegraphic report of notifiable diseases. Local health officers in Michigan have been asked by the department to report polio deaths for their jurisdictions at the same time they report cases.

BIRTHS SLIGHTLY LOWER IN 1953

Provisional figures for the first five months of 1953 show births running slightly lower than for the same months in 1952. The total of births registered through May in 1953, was 66,820 in contrast to the 67,854 recorded in the same interval in 1952.

NEW GRAND RAPIDS HEALTH DEPARTMENT PHYSICIAN

John Morley, M.D., has been employed as Public Health Physician for the Grand Rapids City Health Department effective July 15. Dr. Morley was previously associated with the faculty of the School of Public Health of the University of Michigan.

MEDICAL EXTERNS ON SUMMER PROJECTS

Two junior students from the University of Michigan Medical School have been employed as medical externs for a period of ten weeks during their summer vacation. Mr. Louis Helder has been assigned to the Washtenaw County Health Department where he will study infectious hepatitis and Mr. Frank Linn will work in the Calhoun County Health Department on a project involving the study of morbidity and mortality among the non-white population of Michigan.

LABORATORY STAFF MEMBER HONORED

W. W. Ferguson, Ph.D., Co-ordinating Bacteriologist in the Division of Laboratories of the Department, will present a paper on infant diarrhea at the International Congress of Microbiology in Rome, September 6 to 13. He will also attend the Congress of Genetics held at Lake Como in Northern Italy, August 23 to 30.

DEPARTMENT HOST TO FOREIGN STUDENTS

The summer increase in foreign students observing various phases of the department's work has brought representatives from Brazil, Canada, Chile, China, Colombia, England, Hawaii, India, Nicaragua, the Philippines, Scotland and Uruguay. Most of the students have completed courses at schools of public health and are on observation tours prior to returning to their own countries. They are physicians, dentists, laboratory workers, nurses, and engineers and they stay in the department for periods ranging from a few days to several weeks.

NEW HEALTH OFFICERS ATTEND SEMINAR

Somewhat of a departure in in-service training for new health officers was the recent week-long seminar conducted at the department. Five health officers, two prospective health officers and a medical intern spent the week developing a balanced program for a typical local health department, with consultants of the department in an advisory capacity.

A CURE FOR DOCTOR-BILL FEARS

Several months ago, the *Woman's Home Companion* asked free-lance writer Howard Whitman to do an article covering the doctor-fee situation. He worked with the AMA in gathering much of his material. Later, Mr. Whitman remarked that he was amazed to learn what medical societies and individual physicians all over the country are doing to take the mystery out of charges for doctors' services.

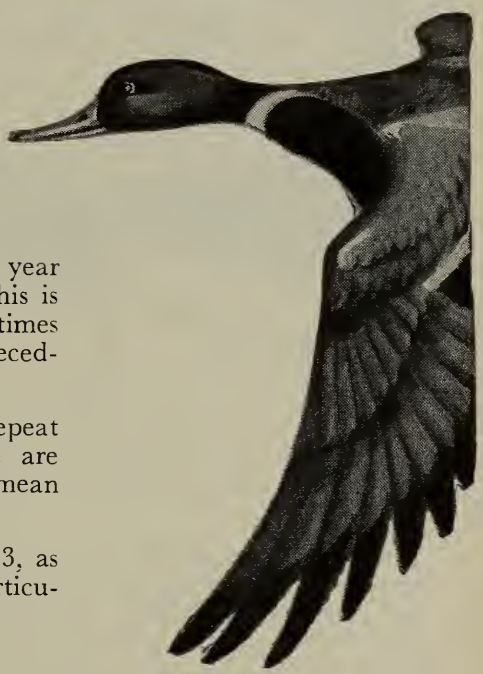
At the suggestion of the AMA Mr. Whitman interviewed physicians and their patients in various sections of the country. Result: an excellent article, entitled "How Much Should Your Doctor Charge?" The article is appearing in the July issue of the *Woman's Home Companion* (circulation: 4,000,000), on sale June 18. It is a fine report on what the article calls "a brand-new cure for doctor-bill fears."—*AMA Secretary's Letter.*





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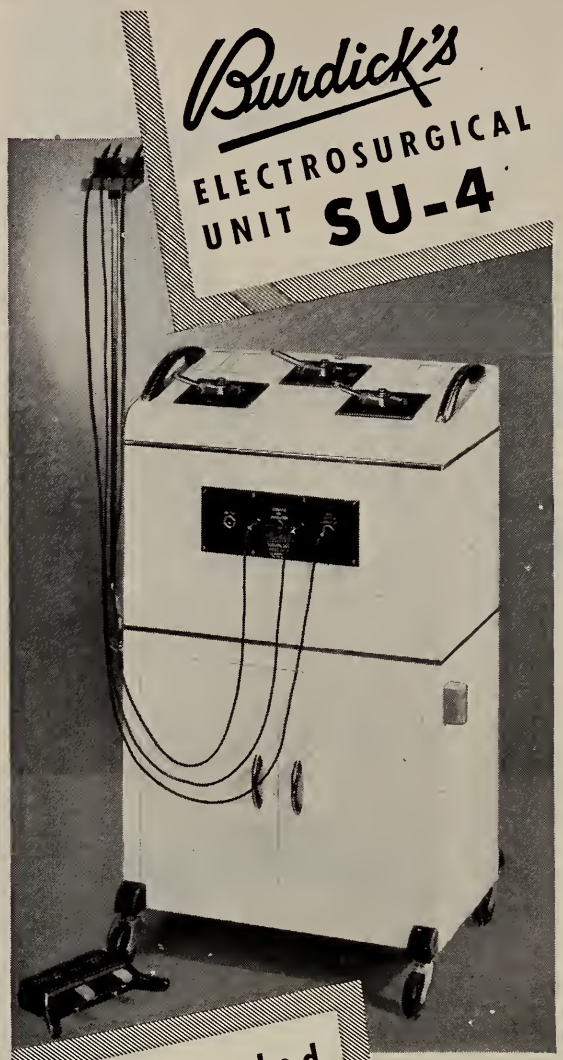
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Legal Opinions

L. Fernald Foster, M.D.
Secretary, Michigan State Medical Society
Lansing 15, Michigan

Dear Doctor Foster:

You have referred to me for opinion an inquiry by a member of the Michigan State Medical Society:

"Are there any legal aspects that would prevent a hospital from requiring a loyalty oath to be given by members of its medical staff?"

The governing board of a hospital may adopt all reasonable by-laws, rules and regulations for the proper conduct of a hospital and of its employes and medical staff. In public hospitals, such as municipal, county, state and federal institutions, the by-laws must also not exceed the powers granted to the governing board of the hospital, nor be in contravention of the applicable statutes and laws affecting such institutions.

Unfortunately, the inquiry did not state whether the hospital in question is a voluntary hospital or a public one. Nor do we have before us the proposed form of "loyalty oath." It is my opinion that the medical staff, as such, could not lawfully impose such a requirement, but that the by-laws and rules of the hospital itself, adopted by its governing board, would have to make such a provision.

In the second place, any oath required to be taken should be uniformly required of all employes and staff members rather than merely the staff members.

In the third place, should such oath be required by the amendment of by-laws, it is doubtful whether a staff member already holding privileges could be properly dismissed from the staff for his failure to sign such an oath before the expiration of the term of his appointment.

In the fourth place, the terms of the oath itself must not be unreasonable within the contemplation of law. In this connection, it may be of interest to note the form of oath required by statute of teachers in this state:

"I do solemnly swear (or affirm) that I will support the constitution of the United States of America and the constitution of the State of Michigan, and that I will faithfully discharge the duties of teacher, according to the best of my ability."

Generally speaking, "loyalty oaths" have been the subject of considerable controversy in various parts of the United States. The University of California and its Board of Regents were named as defendants in a suit brought by certain teachers in that University who refused to subscribe a so-called loyalty oath. The Supreme Court of California held that they were not obliged to subscribe to the oath. There are other places where the question has given rise to a great amount of conflict and litigation, depending on the form of the oath itself.

Unless the particular oath contemplated by the inquiry can be clearly shown to be reasonable, and one which bears a proper relationship to the function of staff members, and is regularly adopted by the governing board, that is to say, the trustees of the hospital, it is my opinion that it may cause considerable legal difficulties, particularly if a present member of the staff refuses to subscribe to it.

The only hospitals in which members of the staff are required to take an oath, as far as I can ascertain, are those in which teachers, instructors or professors of educational institutions supported in whole or in part by public funds, are members of the staff. Such persons are required by statute to subscribe to the following oath:

"I do solemnly swear (or affirm) that I will support the constitution of the United States of America and the constitution of the State of Michigan, and that I will faithfully discharge the duties of my position, according to the best of my ability."

(Act 23, P.A. 1935, as amended).

These staff members are required to take the oath merely because they teach and not because they happen to be staff members of a hospital.

Very truly yours,

J. Joseph Herbert
Legal Counsel

June 22, 1953

* * *

Wm. J. Burns, Executive Director
Michigan State Medical Society
Lansing 15, Michigan

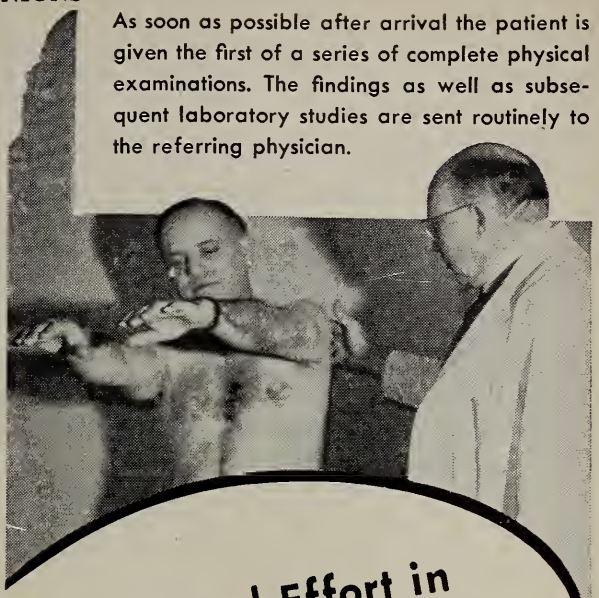
Dear Mr. Burns:

You have referred to me for opinion an inquiry from a member of the Michigan State Medical Society, as follows: "How long should records of deceased patients be kept by his doctor?"

It is assumed that the "records" referred to are the medical records ordinarily made by the doctor in connection with diagnosis and treatment rather than the financial records or financial account of the patient.

There is no statutory or common law requirement for keeping such records any particular length of time. Indeed, there is no requirement for the keeping of records at all, except as a matter of professional custom and good practice. However, such records may have considerable value to the physician should a claim for malpractice be made against him after the death of the patient, or should there be questions raised under life insurance policies of the deceased, or a contest develop as to a patient's competency to make a will. In such cases the records would be of great value to the physician should he be involved as a party or as a witness in the situations above mentioned. These records may also be useful should the doctor find it necessary to file a claim in the estate of the decedent to recover his fees.

The statute of limitations in malpractice suits is two years. The statute of limitations applicable to claims for the recovery of fees is six years after the claim ac-



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crues, or six years after the last payment made on the doctor's bill. Controversies involving life insurance of the deceased would invariably arise shortly after death, as is the case when there is a contest under the will of the deceased involving the testator's competency.

It would seem, therefore, that in ordinary cases if the doctor kept the medical records of the deceased for three years, this should suffice. If he has an unpaid bill chargeable to the estate of the deceased, it may be useful to keep the account until the bill is paid or his claim adjudicated in probate court. His claim for services, as above indicated, would be outlawed in six years after the last services were rendered or the last payment made on the bill. Hence, in such case, it might be expedient to keep the records for more than three years.

Very truly yours,

J. Joseph Herbert
Legal Counsel

June 22, 1953

* * *

Wm. J. Burns, Executive Director
Michigan State Medical Society
Lansing 15, Michigan

Dear Mr. Burns:

You have referred to me for opinion an inquiry from a member of the Michigan State Medical Society involving the following question: May an osteopathic practitioner use the term "physician and surgeon" on his letterhead without qualification?

We assume from the inquiry that "without qualification" is meant that the expression is not prefaced by the word "osteopathic" or a word of similar import. We also assume that there is nothing else on the letterhead, such as the initials "D. O." following the name of the person, or other title to clearly indicate that he is an osteopath.

If the letters "D.O." follow the name of the person, and the expression "physician and surgeon" appears in conjunction with it, there is not much question but that the expression "physician and surgeon" is not used in a medical sense and is, therefore, not objectionable.

If, however, as we assume, there is nothing on the letterhead to indicate that the person is an osteopath or an osteopathic practitioner, the question is a much closer one. The Osteopathy Act of Michigan, being Act 162, P.A. 1903, uses the expression "osteopathic physician," and it has been held that an osteopathic practitioner may practice as a physician and surgeon in the manner and to the extent permitted by the osteopathic licensing act.

The generic term "physician and surgeon," when not qualified, has for many years been regarded as an appellation peculiar to those who are licensed to practice medicine and surgery, that is to say, doctors of medicine, although this is not universally true. In some states it has been held to include others who are qualified to practice the healing arts. In this state, chiropractors have been specifically held as not entitled to the title of

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30 days of Nurse at Home	5.00 per day	10.00 per day	15.00 per day	20.00 per day
Laboratory Fees in Hospital	5.00	10.00	15.00	20.00
Operating Room in Hospital	10.00	20.00	30.00	40.00
Anesthetic in Hospital	10.00	20.00	30.00	40.00
X-Ray in Hospital	10.00	20.00	30.00	40.00
Medicines in Hospital	10.00	20.00	30.00	40.00
Ambulance to or from Hospital	10.00	20.00	30.00	40.00
COSTS (Quarterly)				
Adult	2.50	5.00	7.50	10.00
Child to age 19	1.50	3.00	4.50	6.00
Child over age 19	2.50	5.00	7.50	10.00

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"physician and surgeon." There are no decisions in this state holding that an osteopath may not designate himself as a physician and surgeon.

Some years ago, the attorney general in an opinion of date April 21, 1916, held that the term "physician," as used in the statutes concerning the examination and report on insane, afflicted adults and afflicted children, does not include an osteopathic physician, but that the term is confined exclusively to those who are authorized to practice medicine within our Medical Practice Act. The attorney general made the distinction between the term "physician" as ordinarily used and the term "osteopathic physician" as used in the Osteopathy Act. (Attorney General's Report 1916, Page 514).

Our Medical Practice Act provides in part, in Section 9 thereof, as follows: "Any person who shall append the letters 'M.D.' or 'M.B.' or other letters in a medical sense, or shall prefix the title 'doctor' or its abbreviation, or any sign or appellation in a medical sense, to his or her name, it shall be prima facie evidence of practicing medicine within the meaning of this act."

It will be noted that this prohibition is not made a substantive offense in and of itself, but merely constitutes a prima facie evidence of the practice of medicine. This means that it may be rebutted if the person is brought into court for practicing medicine unlawfully by proofs that he did not in fact practice medicine in violation of the Medical Practice Act.

I am of the opinion that the use of the expression "physician and surgeon" by an osteopath on his letterhead, without in any wise indicating that he is an osteopathic practitioner, is probably a technical violation of law. However, it is also my opinion that a prosecution under the Medical Practice Act could in all probability not be sustained. Moreover, it is entirely conceivable that a court would hold that inasmuch as an osteopath is permitted to act as a physician and surgeon in the manner and to the extent provided by the osteopathic act, the appellation "physician and surgeon" is not in contravention of law.

In view of the fact that this question has never been directly passed upon by our Supreme Court, and under the vague status of our statutory laws on this subject, a categorical reply to the inquiry cannot be made with any degree of certainty.

Very truly yours,

J. Joseph Herbert
Legal Counsel

June 22, 1953

L. Fernald Foster, M.D., Secretary
Michigan State Medical Society
Lansing, Michigan

Dear Dr. Foster:

I would like to congratulate you on an outstanding job on the Medical-Legal Number of The Journal of the Michigan State Medical Society.

Sincerely,
Charles U. Letourneau, M.D., *Secretary*
Council on Professional Practice
American Hospital Association

Chicago, Illinois
May 15, 1953

Knox Gelatine... useful protein supplement for the growing child

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Protein not only helps feed the machine of the growing child but is itself the machinery. An abundance of protein both for body growth as well as for blood, enzyme and hormone synthesis is a primary requirement in childhood. While carbohydrate and fat may be stored in the organism, protein must be taken in daily to maintain the structural mass of tissue.

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The daily diet must contain the so-called essential amino acids as first shown by Osborne and Mendel(1) and more precisely defined by Rose.(2) Once the essential amino acids are furnished, the remaining ones may be taken in abundance from other protein sources to insure full growth and create abundant energy.

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Knox Gelatine is an excellent protein supplement, easy to digest and administer, and non-allergenic. It may be prepared in a variety of ways from Knox Gelatine Drink to delicious salads and desserts.

High Dynamic Action

Gelatine in the form of gelatinized milk has been found a valuable protein supplement helpful in allergies, celiac disease, colic and to increase the digestibility of the milk formula.(3) Its high specific dynamic action(4) which spares essential amino acids and furnishes amino acids for the continuous dynamic exchange of nitrogen in the tissue(5) helps the child to maintain the normal body heat. Furthermore, it contains an abundance of important glycine and proline necessary for hemoglobin formation.

1. Osborne, T. B. and Mendel, L. B., J. Biol. Chem. 17:325, 1914.
2. Rose, W. C., Physiol. Rev. 18:109, 1938.
3. Wolpe, Leon Z. and Silverstone, Paul C., J. Pediat. 21:635, 1942.
4. Lusk, G., J. Nutrition 3:519, 1931. Borsook, H., Biol. Rev. 11:147, 1936.
5. Schoenheimer, R., Ratner, S., and Rittenberg, D., J. Biol. Chem., 127:333, 1939 and 130:703, 1939.

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In Memoriam

JOHN D. ADCOCK, M.D., of Ann Arbor, died May 10, 1953, at the age of forty-four.

He was assistant professor of internal medicine at the University of Michigan Medical School. He first joined the medical staff of the University in 1938 as an assistant resident in the tuberculosis unit and became an instructor in 1940. He left Michigan in 1941 to join the staff of the University of Pennsylvania Hospital at Philadelphia. He returned to Michigan in 1943 to assume his present position.

Dr. Adcock was graduated from the University of Pennsylvania School of Medicine in 1935. He was a member of the American College of Physicians, the American Trudeau Association, the American Federation for Clinical Research and the American Board of Internal Medicine.

He is survived by his wife, Margaret, a son, John, and his mother.

WILLIAM J. DUBOIS, M.D., of Kaleva, died May 9, 1953, at the age of eighty.

For the past three years he had practiced in Kaleva in semi-retirement. Previous to that, Dr. DuBois had practiced in Grand Rapids since 1900 following his graduation in 1899 from the University of Georgia School of Medicine.

He was a member of the Kent County Medical Society and a Life member of the Michigan State Medical Society.

He is survived by his wife, Astrid, and a daughter, Mrs. Richard Elder of Almagordo, New Mexico. He also leaves two grandchildren.

DAVID B. GABERMAN, M.D., of Detroit, died June 12, 1953, at the age of fifty-eight.

Dr. Gaberman had practiced surgery in Detroit for the past thirty-three years. He was a graduate of the Detroit College of Medicine, receiving his medical degree in 1920. He has also taken postgraduate courses at universities in Vienna and Prague.

He is survived by his wife, Eve; two sons, Robert N. Gaberman, and Philip Gaberman, and a daughter, Mrs. Harold Cohen. He also leaves a sister, Mrs. Hyman Wagman.

BEN E. GOODRICH, M.D., of Detroit, died June 15, 1953, at the age of fifty-three.

Dr. Goodrich was in charge of pulmonary diseases at Henry Ford Hospital. He was also working on a research project for the Michigan Heart Association at the time of his death.

He came to Henry Ford Hospital following his graduation in 1926 from the State University of Iowa College of Medicine.

Dr. Goodrich was a member of the Central Society for Clinical Research, American College of Chest Physicians,



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American College of Physicians, and American Trudeau Society. He was a past president of the Michigan Chapter of the American Society of Chest Physicians.

During World War II he was a naval medical officer.

He is survived by his wife, Martha; a son, Frank Goodrich, M.D., on the staff of Henry Ford Hospital; his father, George W. Goodrich, of Gregory; a brother, John, of Washington, D. C.; and three sisters, Mrs. Margaret Jensen, of Harlan, Ia.; Mrs. Beth Hill of Birmingham; and Mrs. Armelia Worden, of Ypsilanti; and two grandchildren.

LEE O. GRANT, M.D., of Grand Rapids, died May 29, 1953, at the age of fifty-four.

Since 1927 he had practiced in Grand Rapids as an otolaryngologist. He received his medical degree from the Marquette University School of Medicine in 1926.

He was a member of the Kent County Medical Society and the American College of Surgeons.

Besides his wife, Elizabeth, he is survived by two sons, William Lee and Richard Peters. He also leaves two brothers and a sister.

HARRY H. HAMMEL, M.D., of Tecumseh, died May 19, 1953, at the age of fifty-nine.

For the past thirty-seven years he had served the community of Tecumseh as a surgeon. He was graduated from the University of Michigan Homeopathic Medical School in 1915.

Dr. Hammel had been chief of staff of the Herrick Memorial Hospital for many years. He was a member of the Lenawee County Medical Society. Dr. Hammel also had served on the Tecumseh School Board for five years.

During World War I, he served with the British Army. Between World War I and II he continued his military service by teaching at the University of Michigan. During World War II he commanded the 216th General Hospital in England, France and Germany. When he left the service he was a full colonel.

Dr. Hammel is survived by his wife, Elizabeth; two daughters, Mrs. Jerry Roberts, of New Jersey, and Irene Hammel, of Kalamazoo; a son, Richard T. Hammel, M.D., of Tecumseh; and a sister, Mrs. Lilas McLain, of Adrian.

GEORGE H. RIGTERINK, M.D., of Hamilton, died April 16, 1953, at the age of eighty.

He had served the community of Hamilton for the past fifty-two years. Dr. Rigterink was graduated from the Detroit College of Medicine in 1900. He was recently honored by Wayne University for fifty years of devotion to medicine.

He is survived by two children, Mrs. Julia Yeaky, of Kalamazoo, and Harold Rigterink, of Philadelphia. A brother, Herman Rigterink, of Kalamazoo, died a short time ago. He also leaves a brother, John V. Rigterink, M.D., of Grand Rapids.



. . . . . NEWS MEDICAL

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Pantlind Hotel-Civic Auditorium, Grand Rapids
Wednesday-Thursday-Friday, September 23-24-25, 1953
YOU ARE URGED TO ATTEND!

Michigan Authors

Robert C. Moehlig, M.D., of Detroit, re-published a short abstract of his article, "Leukoplakia Of Oral Mucous Membrane, Tongue And Anal Region," in the *Digest of Ophthalmology and Otolaryngology,* May, 1953.

C. Mopper, M.D., of Detroit, published an article, Primary Fibrosarcoma Of The Skin," in *The Journal of the American Medical Association,* June 13, 1953.

W. S. Smith, M.D., and **R. W. Bailey, M.D.,** of Ann Arbor, are the authors of an article, "Effect Of Streptomycin In Synovial Tuberculosis Of The Knee," published in *The Journal of the American Medical Association,* June 27, 1953.

Earl G. M. Kreig, M.D., of Detroit, re-published a short abstract of his article, "Anatomy And Physiology Of The Inguinal Region In The Presence Of Hernia," which was reprinted from *Annals Of Surgery,* January, 1953.

The Wisconsin Medical Journal in announcing the Wisconsin annual meeting for October 6, 7 and 8 lists two Michigan speakers:

Traian Leucutia, M.D., of Detroit, "Comparative Evaluation Of Deep Roentgen Therapy And Supervoltage Roentgen Therapy."

William M. Tuttle, M.D., of Detroit, "Surgical Management Of Unresolved Pneumonia."

James L. Wilson, M.D., of Ann Arbor, presented a paper, "Respiratory Obstruction In Infancy," at the annual meeting of the Maine Medical Association, June, 1953.

C. P. Hodgkinson, M.D., of Detroit, reprinted an article, "Relationships of the Female Urethra and Bladder in Urinary Stress Incontinence," from the *American Journal of Obstetrics and Gynecology,* March, 1953.

Charles L. Schneider, M.D., Ph.D., of Detroit, is the author of an article, "Abruptio Placentae after Fetal Death in Utero," published in *The American Journal of Obstetrics and Gynecology,* March, 1953.

A. M. Gottlieb, M.D.; L. J. Baer, M.D., and **P. Jordan, Jr., M.D.,** of Detroit, are the authors of an article, "Mediastinal Lipoma Simulating Cardiac Enlargement," published in *The Journal of the American Medical Association,* July 4, 1953.

Samuel J. Levin, M.D., Detroit, is the author of an original article on "ACTH in Gelatin" published in *Annals of Allergy,* March-April, 1953.

William F. Grimshaw, Detroit, has been appointed Educational Director of the Michigan Epilepsy Center. In addition to leadership in many areas of the Michigan Education Association, Mr. Grimshaw has rendered extensive service in the teacher-public information field. As a staff member of the Michigan Epilepsy Center he will be responsible for assisting in interpreting the program of the Center to the public.

* * *

New Medical Journal.—We have received a copy of the *Journal of the Albert Einstein Medical Center,* Volume 1, Number 3. The Editor-in-Chief is Joseph C. Doane, M.D., of Philadelphia. There are no advertisements, forty-eight pages, one editorial and eight papers, with two book reviews. Unpublished papers, preferably those based on material originating at the Center will be eligible for publication.

* * *

Detroit Dermatological Society.—The annual meeting of the Detroit Dermatological Society was held in Detroit on May 13, 1953. The following officers were elected: President, Henry Brunsting, M.D., Toledo, Ohio; President-Elect, Charles J. Courville, M.D., Detroit; Secretary-Treasurer, Coleman Mopper, M.D., Detroit; and Recorder, Roy H. Holmes, M.D., Muskegon.

The Detroit Dermatological Society holds monthly meetings on the second Wednesday of each month, from September through May.

* * *

Industrial Health Discussional.—Each year for four years Discussionals have been held in Ann Arbor under the auspices of Industrial Health and the School of Public Health. The fourth such Discussional was held on December 4, 1952, and is reported in *Industrial Medicine and Surgery,* May, 1953.

* * *

The American Medical Education Foundation.—The annual report for 1952 is just received.

In 1951 there were 1,876 individual contributions among the doctors to this fund which is endeavoring to meet the emergency needs of our medical schools to

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avoid the necessity of government support and dominance.

The year 1952, showed 7,259 individual contributors among the doctors. This represents 162 from Michigan, with the contribution of $10,519.19. In our neighboring state, Indiana, 1,217 individual contributors gave $58,152.54; eighty-eight contributors in Illinois gave $37,151.30; 268 contributors in Ohio gave $13,177.

Michigan's show is hardly up to top rank in this group of states.

Gifts directly to medical schools: University of Michigan or Wayne University, especially the Library Fund, are not included in this list.

In addition to the above contributions made directly to the Fund there were 1,554 contributors to the University of Michigan School, $218,939; and 570 contributors to Wayne University College of Medicine, $54,754.37; 1,564 of these contributors were from Michigan. All of these names are listed in the annual report just published.

Grants have been made from the Fund direct to medical schools during the year 1952; University of Michigan, $41,857, and Wayne University, $35,024, as of September 30, 1952.

* * *

Michigan Chapter, American College of Chest Surgeons.—The newly elected officers of the Michigan Chapter of American College of Chest Surgeons for the year 1953-1954: Lawrence Pratt, M.D., President; F. D. Dodrill, M.D., Vice President, and Wm. Harold Barron, M.D., Secretary and Treasurer.

C. E. Umphrey, M.D., F.A.C.S., announces the removal of his office to 15300 W. McNichols Road, Cor. Whitcomb, Detroit 35. By appointment, General Surgery.

* * *

AMA Annual Session, 1953.—The final figures of total attendance: Doctors of Medicine, 17,958; Residents, internes, technicians, students, nurses and physicians' guests, 24,186; exhibitors and exhibitors' guests, 6,836; a grand total of 48,980.

* * *

Polio.—The odds may be as high as 150 to one against a child contracting polio during the first twenty years of his life, it was estimated in the introductory issue of a new medical publication now being distributed to the nation's physicians.

The publication, entitled *Pediatric Clinics of North America* and containing nine definitive articles on polio, was prepared with the editorial assistance of the National Foundation for Infantile Paralysis. It is published by W. B. Saunders Company of Philadelphia, medical book publishers.

Designed to provide the latest information on the diagnosis and management of polio, the introductory issue is being distributed free of charge by the W. B. Saunders Company to 110,000 practicing physicians in the United States.

The first regular issue is due in February, 1954, and every three months thereafter. The publications will present symposia on methods of management currently in use for the handling of various pediatric problems.

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The "guestimate" on a child's chance of contracting polio was advanced in an article in the new publication by Dr. Henry W. Kumm, assistant director of research of the National Foundation for Infantile Paralysis.

He arrived at the approximate odds on the basis of an analysis of birth data and polio incidence figures, involving more than 600,000 children, from four states—New York, Connecticut, Massachussets and North Carolina.

These calculations, he said, indicate that "one out of every 156 children born in 1930, 1931 or 1932, in Connecticut, Massachusetts, New York or North Carolina acquired poliomyelitis in the first twenty years of his life."

Also contained in the symposium are articles by: Dr. David Bodian, Johns Hopkins School of Hygiene and Public Health; Dr. Alex J. Steigman, University of Louisville; Dr. James L. Wilson, University of Michigan School of Medicine; Dr. Jessie Wright, University of Pittsburgh; Dr. William T. Green, Harvard Medical School; Dr. Howard A. Rusk, New York University College of Medicine, and Dr. Jonas Salk, University of Pittsburgh.

* * *

Thirty, Twenty, and Ten Years Ago.—

1923: Warren G. Harding had just died. Coolidge was sworn in—a period of silence. Income tax, which was 4 per cent on individuals and 12.5 per cent on corporations, was listed as "altogether too high"; the request was for cutting the rates and simplifying the reports. Radio was in its infancy, but a lot of folks were fussing with crystal sets.

1933: President Roosevelt went into the White House. The banks and stock exchanges closed. The new President was given great powers the first 100 days of Congress—and America went off the gold standard. The alphabetical bureaus started: NRA, AAA, CCC, FERA, WPA. On the scene came Henry Wallace and Harry Hopkins and public works and "boondoggling." Prohibition was repealed and Hitler arrived in Germany.

1943: A harsh and long war, all over the world: in the Pacific, in Africa, in Europe, and back in the Pacific. The briefest review is the U. S. casualty list totalling 1,100,000 and the cost in U.S. money, over $300,000,000,000!

* * *

The Crippled Child magazine, sponsored by the National Society for Crippled Children and Adults, in the future will be slanted especially to help the parents of crippled children in their many and varied problems. Formerly, the book was directed primarily at professional workers with the handicapped. The change in policy reflects the Society's conviction that the success or failure of efforts with the individual crippled child rests on the attitude of the parent, according to Lawrence J. Linck, Executive Director.

* * *

Wayne L. Whitaker, Ph.D., secretary of the University of Michigan Medical School since 1948, was appointed assistant dean on July 1. Dr. Whitaker will act as chair-

man of the Admissions Committee of the Medical School. Dr. Whitaker, who received his Ph.D. in 1939, will continue to serve as Associate Professor of Anatomy.

* * *

Use of the widely-advertised "Koch" treatment as a remedy for cancer was recently found to constitute malpractice in an action in Florida in which the jury awarded $65,000 damages against a Tampa physician, Julius F. Baldor, M.D. The case received nationwide attention and expert witnesses were there from Chicago, Detroit, and several other cities. Charles S. Cameron, M.D., Medical and Scientific Director of the American Cancer Society, was on the stand for several hours testifying on behalf of the plaintiff, J. T. Rogers, seventy-two-year-old farmer in whose favor the case was decided. . . . Albert W. Dilling of Chicago, Dr. Koch's own personal attorney, acted in Baldor's defense as did Koch's son John, of Del Ray Beach. The jury heard testimony and argument for seven days. Then it deliberated for three hours before bringing in the judgment.—From *Cancer News,* July, 1953.

* * *

A thousand copies of "The Story of Cancer for High Schools" have been purchased by the Cancer Committee of the Colorado State Medical Society for use in the schools in that state. This order brings to more than 14,000 the number of copies of this Manual that have been distributed to the schools in Michigan and to schools and libraries in other states.

Requests for additional copies from many states continue to reach the Cancer Control Committee, MSMS, under whose auspices the Manual was prepared and published.

* * *

The Veterans Administration Regional Office, 310 E. Jefferson Street, Detroit 32, through its Acting Manager, Lloyd H. Jameson, reports the need for two physicians to fill the position of Rating Specialist, Medical, GS-12, in the adjudication of veteran claims. For additional information write Mr. Jameson and refer to File 3029-5.

* * *

William A. Hudson, M.D., Detroit, recently was chosen President-Elect of the American College of Chest Physicians. Willard B. Howes, M.D., Detroit, is Regent of the College for Michigan and Ohio, and Constantine P. Mehas, M.D., Pontiac, is Governor of the College for Michigan. The next annual meeting of the College will be held in San Francisco, June 17-20, 1954.

* * *

Correction: Through error Cecil Corley, M.D., Jackson, was listed from Detroit in the "Heart Beats" column in the June JMSMS. Dr. Corley is Chairman of the Committee on Cardiovascular Clinics.

* * *

Elwood A. Sharp, M.D., Director of Clinical Investigation for Parke, Davis & Company, Detroit, received an award for distinguished service in medicine from the

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Alumni Association of the University of Kansas, on June 7.

Congratulations, Dr. Sharp!

* * *

Frank H. Lahey, M.D., founder of Boston's Lahey Clinic, and one of the nation's foremost surgeons and teachers, died early in July at the age of seventy-three.

Dr. Lahey was Past President of the American Medical Association, the American College of Surgeons, and many other medical societies and scientific organizations, including the American Medical Golfing Association in which he took great pride. He was a frequent speaker at MSMS Annual Sessions and Michigan Clinical Institutes.

* * *

Wm. J. Burns, MSMS Executive Director, was elected on July 21 as a Director of the American Trade Association Executives, in annual session at Atlantic City. Mr. Burns is the first representative of professional societies to be elected to ATAE directorship.

* * *

O. T. Mallery, Jr., M.D., Director of the Institute of Industrial Health, University of Michigan, announces the addition of Warren A. Cook, M.D., to the staff as a full-time research associate and consultant. Dr. Cook is a graduate of Dartmouth and of the Yale University Graduate School, Department of Chemistry.

* * *

The Upper Peninsula Medical Society meeting in Escanaba, June 19-20, attracted over 200 registrants to hear an excellent scientific program and to enjoy splendid social arrangements, under the presidency of Louis P. Groos, M.D., of Escanaba. Dynamic speaker at the annual banquet was Dr. Clark Kuebler, President of Ripon College, Wisconsin.

The 1954 meeting will be held in Menominee under the chairmanship of John T. Kaye, M.D., of that city.

Firm's Right to Give Funds to Institutions Upheld.—In a far-reaching decision, Superior Court Judge Alfred A. Stein of Newark, N. J., last week upheld the right of a corporation to donate funds to a private institution. Judge Stein's ruling sustained the constitutionality of a $1500 contribution to Princeton University donated by the board of directors of the A. P. Smith Company of East Orange and Bloomfield in 1951. In his declaratory judgment, the judge said the "contribution here is towards a cause which is intimately tied into the preservation of American business and the American way of life."

* * *

Retro-lental Fibroplasia Registry.—Blindness in a child is not only a serious handicap to the youngster but imparts a feeling of hopelessness to the parents. The child and the parents need help in overcoming the psychological effects of the blindness.

It has been noted that approximately half of the children admitted to the Michigan School for the Blind are suffering their handicap because of retro-lental fibroplasia. Retro-lental fibroplasia develops particularly in

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The pathologist in direction is recognized by the Council on Medical Education and Hospitals of the A. M. A.

premature infants weighing less than four pounds at birth.

To reduce the hopeless feeling by parents and to give the child sufficient early training, the Michigan Department of Health is developing a registry of blind and partially sighted infant and pre-school children. Through this registry, the Superintendent of the School for the Blind will be able to know which families in the state require assistance. In many cases home training will be conducted by the public health nurse or a trained social worker in aiding the blind handicapped child.

The master registry will be at the Health Department in Lansing, but local health units will register children and supply the information to the central office.

The Michigan State Medical Society's Child Welfare Committee urges M.D.'s who know of children with serious visual handicaps to notify the Vision Unit of the Maternal and Child Health Section of the Michigan Department of Health. In this way the family may become acquainted with the parent institute held annually at the Michigan School for the Blind.

News of the death on July 9 of Henry E. Perry, M.D., Newberry, Past President of the Michigan State Medical Society, reached THE JOURNAL as this number was going to press. Dr. Perry presided over the State Society in 1936-37. A fitting necrology will be published in the September issue.

Edward J. McCormick, M.D., Toledo, newly elected President of the American Medical Association, has urged the nation's doctors and business leaders to give more support to fund-raising campaigns for the expansion of medical facilities.

* * *

How Far from a Physician?—Approximately 509,000 square miles or one-sixth of the entire United States, was more than a radius of twenty-five miles from a physician in active private practice in April, 1950.

Most of this territory is located in the Rocky Mountain and Great Plains regions; approximately 237,000 persons, or one-fifth of 1 per cent of the entire population of the U. S., resided in these wide open spaces where the nearest neighbor is often miles away. The relatively small number of persons in these sections without physicians refutes most of the arguments about the unavailability of physicians' services in many parts of the U. S.—*AMA Bureau of Medical Economic Research.*

* * *

Urology Award.—The American Urological Association offers an annual award of $1,000.00 (first prize of $500.00, second prize $300.00 and third prize $200.00) for essays on the result of some clinical or laboratory research in Urology. Competition shall be limited to urologists who have been in such specific practice for not more than ten years, and to men in training to become urologists.

For full particulars, write the Executive Secretary,

William P. Didusch, 1120 North Charles Street, Baltimore, Maryland. Essays must be in his hands before February 1, 1954.

* * *

L. Fernald Foster, M.D., Bay City, MSMS Secretary, recently was chosen Chairman of the State Journal Advertising Conference to be held in Chicago, November 9-10, 1953, at the AMA headquarters.

* * *

Following the late Dr. Angus McLean on the Detroit Board of Education in 1939, Dr. Clark D. Brooks of Detroit has served continuously for fourteen years. He advocated more teaching facilities for handicapped children, extensive vocational training and an expanded physical education and recreational program. Dr. Brooks' service provides an example for all M.D.'s to follow.

* * *

The Seventh Annual Meeting of the Michigan Rural Health Conference is scheduled for January 14-15, 1954, in the Genesee County area. Dr. John R. Rodger of Bellaire was named General Chairman at the June 30 meeting of Conference Sponsors. The theme will include the effect of business and industry on rural health.

* * *

Duncan J. McColl, Jr., prominent Port Huron attorney and Circuit-Judge-elect, son of D. J. McColl, Sr., M.D., of Port Huron, and brother of Clark M. McColl, M.D., of Detroit, died July 6, in Detroit. Mr. McColl served as a State Representative in Lansing from 1929 to 1935, was St. Clair County Prosecutor 1936 to 1942, and was scheduled to take office as Circuit Judge next January 1.

* * *



U. R. Bryner, M.D., of Salt Lake City, President of the American Academy of General Practice, will be guest speaker at the Michigan AAGP meeting, Pantlind Hotel, Grand Rapids, Thursday, September 24, 1953. Dr. Bryner will speak at the dinner meeting of the Michigan Academy, following "General Practice Day" of the Michigan State Medical Society convention. All MSMS members are cordially invited to hear President Bryner, one of the creators of the American Academy of General Practice.

* * *

What is the Michigan Volunteer Advisory Committee to the Selective Service System? Where does this Advisory Committee get its authority?

Answer: The Michigan Volunteer Advisory Committee to the Selective Service System is composed of the representatives of the medical, dental and veterinary professions. The chairman of this committee is Grover C. Penberthy, M.D., Detroit. The address is 4421 Wood-



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SURGERY—Intensive Course in Surgical Technic, two weeks, starting Setember 14, September 28, October 12
Surgical Technic, Surgical Anatomy and Clinical Surgery, four weeks, starting October 26
Surgical Anatomy and Clinical Surgery, two weeks, starting August 17, November 9
Gallbladder Surgery, ten hours, starting October 26
General Surgery, one week, starting October 5
Surgery of Colon and Rectum, one week, starting September 21
Basic Principles in General Surgery, two weeks, starting September 21
Thoracic Surgery, one week, starting October 12
Esophageal Surgery, one week, starting October 19
Breast and Thyroid Surgery, one week, starting October 26
Fractures and Traumatic Surgery, two weeks, starting October 26
GYNECOLOGY—Intensive Course, two weeks, starting September 21
Vaginal Approach to Pelvic Surgery, one week, starting August 31
OBSTETRICS—Intensive Course, two weeks, starting October 5
DERMATOLOGY—Intensive Course, two weeks, starting October 19
MEDICINE—Electrocardiography and Heart Disease, two weeks, starting October 12
Intensive General Course, two weeks, starting September 28
Gastroenterology, two weeks, starting October 26
Allergy, one month and six months, by appointment
CYSTOSCOPY—Ten-Day Practical Course starting every two weeks
UROLOGY—Intensive Course, two weeks, starting September 28

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ward Avenue (David Whitney House), Detroit 1, Michigan.

The functions of this committee were set up in Public Law 779 by the 81st Congress (as amended by P.L. 84 of the 83rd Congress). The law reads as follows:

"It shall be the duty of the National Advisory Committee, in conjunction with the State and local volunteer advisory committees, to make determinations with respect to persons in residency training programs who shall be recommended for deferment for the purpose of completing such residency programs, and in making such determinations shall give appropriate consideration to the respective needs of the Armed Forces and the civilian population. The National Advisory Committee in conjunction with the State and local volunteer advisory committee are further authorized to make appropriate recommendations with respect to members of the faculties of medical, dental, veterinary, and allied specialists schools, schools of public health, and with respect to physicians, dentists and veterinarians engaged in essential laboratory and clinical research, having due regard to the respective needs of the Armed Forces and the Civilian population."

Doctors of medicine with problems or those who desire information on the doctor draft law, which has been extended to July 1, 1955, should feel free to call for advice from the Michigan Volunteer Advisory Committee, Grover C. Penberthy, M.D., Chairman.



The tuberculin test demonstrates infection; tuberculosis infection demonstrates the need for chest x-ray.

X-ray for routine check-up of patients is not always economically practical. Tuberculin testing can be used at little or no extra cost to rule out the possibility of tuberculosis—both for children and for adults.

Michigan Tuberculosis Association

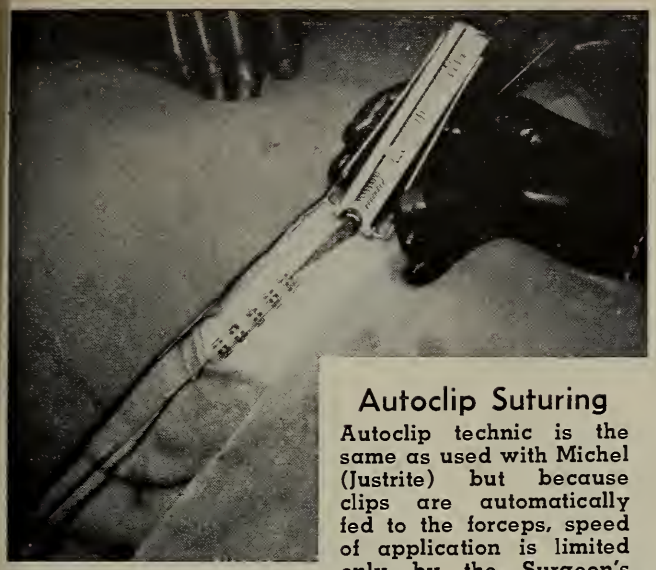
Temporary Licensure

Following is an explanation of the two types of temporary licensure issued by the Michigan Board of Registration in Medicine and the credentials needed for each:

Temporary licensure for postgraduate work in an approved training hospital—This temporary license was made possible by Senate Bill No. 301 which, when passed by the Michigan Legislature in 1952 and signed by the Governor, became Public Act No. 172 of 1952.

Temporary licensure for postgraduate work in an approved training hospital may be issued to applicants with the following credentials:

1. Graduation from an approved class-A medical school in the United States or Canada.
2. Certification of an approved internship served in the United States or Canada.
3. For foreign graduates—fulfillment of extra educational credentials as per the Rules and Regulations, Paragraph H, and a certified approved internship in the United States or Canada.



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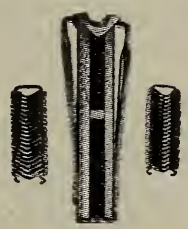
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All trainees, which includes interns, assistant and resident physicians are exempt from the basic science certificate requirement by the basic science law which states, " . . . this act shall not be construed as applying to interns and residents who are training in Michigan hospitals."

Temporary licensure for private practice—Doctors holding this license enjoy all the privileges of a fully licensed doctor of medicine with permanent Michigan license. The requirements are the same as itemized above for the temporary license for postgraduate work plus the following:

1. Basic science certificate, unless exempt.
2. Completed Endorsement Application with $100 fee on file in our office, or successful Michigan licensure examination with fee of $50.

(Since these applicants are no longer trainees, they are not exempt from the basic science requirement.)

Temporary licensure, both for postgraduate work and private practice is to be issued for a period not to exceed five years and must be renewed annually at $10 per annum.

Temporary license for private practice was made possible by Senate Bill No. 1261, of 1953, *but is limited* by the bill to *Canadian citizens* with Canadian credentials or *DP doctors* who entered the United States under the DP act of 1948 and have resided in Michigan since January 1, 1952.—From Michigan State Board of Registration in Medicine.

Future Meetings

1. **In-service training course on "Technical Testimony,"** under the sponsorship of the University of Michigan School of Public Health, Ann Arbor, October 21, 1953.

All MSMS members are cordially invited to attend this interesting and informative course.

2. **The United States and Canadian Sections of the International College of Surgeons** will meet at The Waldorf-Astoria in New York, September 13-17, 1953. The first day's session, open to the public, will introduce the International Surgeon's Hall of Fame. The four-day scientific meeting will feature a Film Forum on Monday evening and a Forum on Pharmacology in Surgery on Tuesday evening. The banquet will be Wednesday evening, the Convocation (in Carnegie Hall) on Thursday evening. Among the speakers will be: Komei Nakayama, of Chiba, Japan and George J. Papayannopoulos, of Athens, Greece.

3. **The New York Academy of Medicine** announces its Twenty-Sixth Annual Graduate Fortnight on October 19-30, 1953. This year's program is on "Disorders of the Blood and the Blood-Forming Organs." For information, write the Academy at 2 East 103 Street, New York, N. Y.

4. **Michigan Nutrition Day** will be held at Kellogg Center, Michigan State College, October 12, 1953. The theme of the program will be "Our Changing Food Supply" and include such topics as "Food Fortification,"

"The Soil as it Affects the Nutritive Quality of Food," "Food From the Garden to the Table," "Chemicals in Foods," "Fluoridation of Public Water Supplies." For program write Stanfield Wells, Kellogg Center, Michigan State College, East Lansing.

5. **The Second International Congress of Cardiology** will be held at the Mayflower Hotel, Washington, D. C., September 12-15, 1953. For program and information, write L. W. Gorham, M.D., Secretary-General, 44 E. 23rd St., New York 10, N. Y.

6. **The American College of Surgeons 1953 Clinical Congress** will be held in Chicago, October 5-9, 1953, at the Conrad Hilton Hotel. The scientific program will include surgical forums, clinics and postgraduate courses. Sir James Paterson Ross. of London. England, will give the Martin Memorial Lecture on "Science and Surgery."

A Sectional Meeting of the ACS will be held in London, England, May 17-19, 1954.

7. **The State Bar Medicolegal Institute,** arranged in co-operation with The Law-Science Institute of the University of Texas, under the direction of Hubert Winston Smith, M.D., will be held at the Sheraton-Cadillac Hotel, Detroit, Thursday-Friday, December 10-11, 1953.

Dr. Smith has gained nationwide recognition as the director of the famous Law-Science Short Courses which have been held at Tulane University, New Orleans, University of Houston, and other places, and this year are being conducted also in Chicago, New York, Atlanta and San Francisco.

The two-day meeting will be the first "Interval Short Course" to be followed at approximate six-month periods by second and third "interval" courses. Registrants who attend all three sessions may qualify for the Law-Science Certificate.

Registration fee: $25.00 per person for the two days; an additional fee, not exceeding $3.00, may be set to cover the cost of mimeographed materials. Advance registrations may be made by sending $25.00 made payable to the Michigan Law Institute, to the State Bar headquarters at 412 Olds Tower, Lansing.

* * *

8. **F. J. Pinkerton, M.D.,** Honolulu, Director General of the Pan-Pacific Surgical Association, cordially invites all Michigan doctors of medicine to attend the sixth Pan-Pacific Surgical Association Congress scheduled for Honolulu on October 7-18, 1954. For program and additional information, write Dr. Pinkerton, at Suite 7, Young Hotel Building, Honolulu, Hawaii.

9. **The American Congress of Physical Medicine and Rehabilitation** will hold its Clinical Session August 31-September 4, 1953, at the Palmer House, Chcago. For information, write the Congress at 30 N. Michigan Avenue, Chicago 2, Ill.

* * *

Four generations of the Breakey family span almost the entire history of the University of Michigan Medical School. When Barry stepped across the turf of Michigan Stadium in June, 1953, to receive his diploma, he followed in the footsteps of father, grandfather, and great-grandfather. (See Page 822.)

* * *

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CLINICO-PATHOLOGIC CONFERENCE

(Continued from Page 869)

of myocardium normally supplied in part by the right coronary artery. This is uncommon and is termed "ectopic infarction," or "infarction at a distance." Bean[1] found nine such cases in a review of the autopsy material of 287 cases of myocardial infarction.

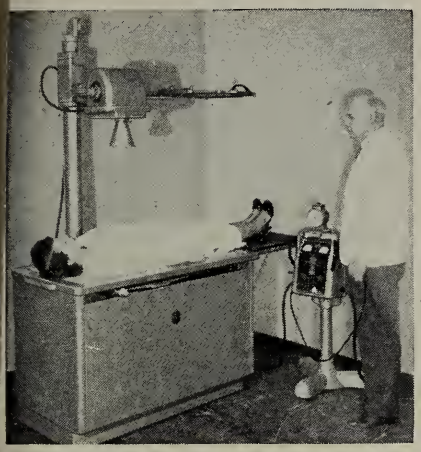
The second feature of interest concerns the cause of necrosis within the central portion of the hepatic lobules. Although this is often attributed to increased back-pressure from a failing heart, Clarke[2] believed that the cause was shock with a sudden decrease of oxygenated blood reaching the liver through the hepatic artery. He found nine examples of this in sixty-one cases of recent myocardial infarction. In comparison, only one instance was found in fifty cases of prolonged heart failure. In the remaining forty-nine cases, the centrilobular zones disclosed hyperemia, fibrosis, and atrophy. These facts warrant consideration of shock as the cause of necrosis in the central zones of the hepatic lobules in cases of recent myocardial infarction.

If there is no further discussion, the meeting is closed.

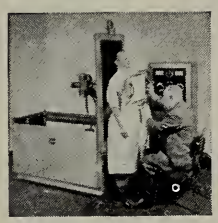
References

1. Bean, W. B.: Infarction of heart; clinical course and morphologic findings. Ann. Int. Med., 12:71, 1938.
2. Clarke, W. T. W.: Centrilobular necrosis following cardiac infarction. Am. J. Path., 26:249, 1950.

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Acknowledgment of all books received will be made in this column, and this will be deemed by us as full compensation to those sending them. A selection will be made for review, as expedient.

THE CONCEPTION OF DISEASE ITS HISTORY; ITS VERSIONS AND ITS NATURE. By Walther Riese, M.D., New York: Philosophical Library, 1953. Price $3.75.

This booklet of 100 pages is based on the author's belief that "the various concepts of disease have always been overlapping, living side by side, at each stage of human history and the road from primitive to rational thought has to be sought and rediscovered anew by each generation and each individual. At every moment of his history man has to rewrite the history of mankind." He has traced the various concepts of disease back to their historical sources. He begins with the Stoic concept. This concept was based on judgment and a type of rejection of disease. The Plato concept was based on disproportion or discord of the four constituents, viz.—earth, fire, water and air. The Hippocratic thesis suggested observation, health regimentation and diet. He mentions Rosseau's and Freud's antithesis to the Hippocratic concept. He mentions Sydenham's opinions regarding disease, Galen's physiological concepts, Vesalius' anatomical concepts, Morgagni's pathological concepts, and Virchow's cellular concept. Then there are short chapters on the social, psychological and metaphysical concepts of disease. He has tried to trace the history of medical doctrines as "a movement of thought rather than of men and happenings." For those physicians interested in the historical and philosophical background of their profession this study should be both interesting and stimulating.

G.K.S.

PHYSICAL EXAMINATION OF THE SURGICAL PATIENT. By J. Englebert Dunphy, M.D., F.A.C.S., Associate Clinical Professor of Surgery, Harvard Medical School; Surgeon, Peter Bent Brigham Hospital; Consultant in Surgery, Children's Medical Center, and Thomas W. Botsford, M.D., F.A.C.S., Clinical Associate in Surgery, Harvard Medical School; Senior Associate in Surgery, Peter Bent Brigham Hospital, and Associate in Surgery, Children's Medical Center. Philadelphia: W. B. Saunders Co., 1953. Price $7.50.

In the preface to this text the authors contend that an x-ray, laboratory test, or a consultation is no substitute for the art of "looking at the patient," using as tools the eyes, ears, fingers, nose and brain. Significantly, the book is dedicated to David Cheever, M.D., and John Homans, M.D., who long demonstrated the art of surgical diagnosis to succeeding generations of Harvard medical students on the wards of the Peter Bent Brigham Hospital. To these gentlemen, and to the Harvard Medical School faculty, many of whom were helpful in the writing of the book, the authors express indebtedness.

The text itself is divided into two parts: Part One, the Elective Examination, Part Two, the Emergency Examination. All chapters are well written. An appendix includes a check list for the physical examination which should prove useful to students and there is an adequate bibliography.

As is true with Saunders' books, the format is good, the type well chosen and the line drawings are excellent. From all standpoints the book is very readable.

It is recommended as an addition to the library of the student, the surgeon, the internist, and especially to the family physician, who so often sees the patient first and upon whose diagnostic skill so much is dependent.

J.W.H.

THE PSYCHOLOGY AND PSYCHOTHERAPY OF OTTO RANK; An Historical and Comparative Introduction. By Fay B. Karpf, Ph.D., Author of American Social Psychology: Its Origins, Development, and European Background. New York: Philosophical Library, 1953. Price $3.00.

This booklet is based on the life of another of Freud's rebellious and infractious brood of ducklings. Otto Rank was probably more subservient to the will and ideas of the so-called Master than some of the others. He was not a physician and therefore probably had less training as an independent thinker. The writer is a doctor of philosophy who favors the utilization of psychologists as psychotherapeutists. This concept is not in agreement with the majority viewpoint of the American Psychiatric Association.

It would appear from this writing that the entire group, including Freud, got their ideas from Nietzsche,





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Schopenhauer and Ibsen. There was the problem of digestion and assimilation and indigestion. For those individuals who enjoy abstract and philosophical expressions this may be a worthwhile book.

G.K.S.

HEADACHES, THEIR NATURE AND TREATMENT. By Stewart Wolf, M.D., Professor and Head of the Department of Medicine, University of Oklahoma School of Medicine, and Harold G. Wolf, M.D., Professor of Medicine (Neurology), Cornell University Medical College. Illustrated. Boston: Little, Brown and Co., 1953. Price $2.50.

The book is written for the lay reader in practical, everyday language. It covers the many causes of headache in a simple conversational style with a strong emphasis on the emotional and psychological background of migraine and other stress factors causing headache. The only new approach in treatment is the pointing up to the lay reader the need for emotional readjustment. Some interesting case histories are given which would be of value to the physician who has not given particular thought to the emotional factors in headache.

J.E.L.

Any patient who has lost more than 20 per cent of his normal body weight will have certain nutritional problems that must be corrected prior to any major surgical procedure.

* * *

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HOSPITAL COSTS

(Continued from Page 874)

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The Commission on Financing of Hospital Care has been carrying on its studies for about two years, and we have a partial report showing the numbers of Blue Cross paid patients as against private pay, substantiating the fear of the Michigan Commissioner of Insurance that hospitals must now depend very largely on prepayment and insurance money for their financing. On January 1, 1953, 27 per cent of the United States population were covered by Blue Cross. Some states are outstanding in coverage by Blue Cross: Rhode Island, 75 per cent; Delaware, 61; New York, 47; Pennsylvania, 46; Michigan, 45; Ohio, 44, and Massachussets, 43.

Michigan leads in another item of hospital costs —it is the highest—$22.50 per patient day, with Rhode Island about a dollar less, and Massachussets another dollar less. This last item recalls the study being made by the Joint Committee headed by Wm. S. Reveno, M.D., and made by Harry F. Becker, M.D., now covering over thirteen thousand admissions. This report will be ready for the Michigan State Medical Society House of Delegates in September at the Grand Rapids Annual Session.

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VOLUME 52 SEPTEMBER, 1953 NUMBER 9

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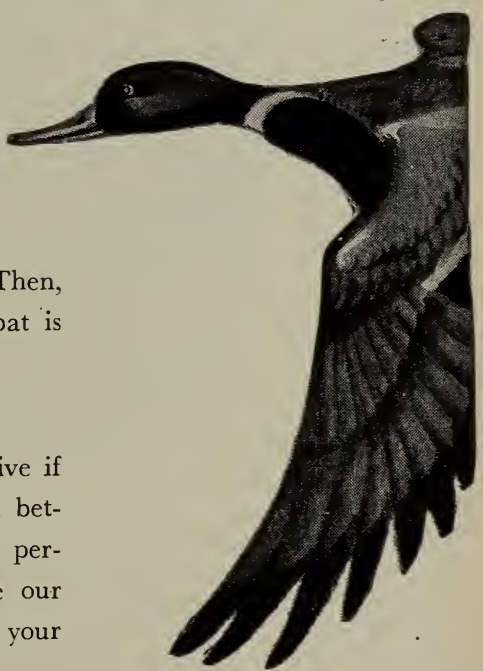
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STUDENTS AMERICAN MEDICAL ASSOCIATION

The following letter addressed to William Bromme, M.D., Chairman of The Council, with its accompanying report adds another chapter to the annals of this enthusiastic young group.

Dear Dr. Bromme:

I am sorry that circumstances beyond my control have made it impossible to accept your invitation to attend the August MSMS Council meeting. The opportunity to have personally presented the enclosed report, and to have met the members of the Council appealed strongly to me. Perhaps in future dealings I may again be offered the honor.

The attached summary of activities of the recent SAMA Convention should give you an indication of what we feel is remarkable growth. Manifesting the widespread effects of the enthusiasm possessed by a handful of medical students who assembled only two years ago, you may be interested in knowing that recently the sixty-fourth school from a total of eighty-one medical schools in the country has applied for membership. This gives us a total of 79 per cent school membership.

I would like to take this opportunity to thank you and all of the Council and Committee members for the interest you have shown in the Wayne University Student Medical Society and the SAMA, as seen by your willingness to finance the trip and living expenses of the delegate and alternate delegate to the past conventions. My hope is that the MSMS will profit from our experiences gained, as much as we have mutually benefited and benefited from the SAMA Conventions.

Sincerely,
DANIEL D. HEFFERNAN,
Delegate

Report on 1953 SAMA Convention

The Convention this year stressed educational programs more so than policy, since the mechanics of the SAMA are now in efficient operating order. The growing pains of our young organization, for the most part, appear to be a thing of the past.

Included in the programs were panel discussions of local chapter activities and accomplishments, the most recent Selective Service concepts and trends, and the merits and problems of a general practice. The means of maintaining an operating budget by such means as assuming possession of Coca-cola concessions was considered, in order to enable the chapter to sponsor a Medical School yearbook, the publishing of a periodic news-letter, and other similar worthwhile ventures. The establishment of an annual moot court trial involving a medico-legal case, participated in by senior Law and Medical students, has been a success of one of our chapter schools.

The panel discussion on "General Practice as a Specialty" had Dr. J. S. DeTar, of Milan, as moderator—this proved to be popular by the enthusiastic questions from the students. Likewise the panel which discussed "The Doctor Draft and You," moderated by Mr. C. J. Stetler, and representing the views of both the Army and the Selective Service Board, was of utmost interest to those of us concerned.

A scientific presentation was made by Dr. D. F. Dodrill on "The Michigan Mechanical Heart." Both slides of fundamental anatomy and operative procedures and the movie of the Harper Hospital operation were shown. Also on the list of educational features was a documentary film of an intern's life in rural Mexico.

Among matters of policy which attracted the most attention were the perennial problems of: (1) Selective Service, (2) The Internship Matching Plan and (3) Membership in the International Federation of Medical School Associations. A number of proposed minor amendments to the constitution were rejected with a minimum of difficulty. The Reference Committee on Internships was assisted by representatives of the National Inter-association Committee on Internships, who patiently answered questions regarding the Internship Matching Plan. The general consensus of student opinion on this matter is quite favorable. In the past, communication has been carried on with several foreign Medical student groups. It was resolved at this convention that further investigation be made with an eye toward sending a delegate in the near future to the international convention.

Colored movies of our activities were taken, which will soon be available, complete with a narration, to state and county Medical Societies. This medium is expected to accomplish a great deal in the direction of healthy public relations. The Executive Secretary also reported that the JSAMA will undergo alterations, with additions to include monthly medico-legal cases and a column exposing the methods of quacks. The report of the Treasurer was pleasing to the ear. Our young organization is already virtually out of debt, and in the near future it is hoped that we can clear our financial indebtedness to the AMA.

As for my own personal contribution to the convention, I was appointed to the Chairmanship of the Nominations Committee, and thus in the line of duty my time was spent meeting my fellow delegates and observing their performances.

Once again Michigan is represented among the officers of the SAMA. Apparently my "glad-handing" backfired, and consequently I was elected to the office of Treasurer.

Respeectfully submitted,
DANIEL D. HEFFERNAN,
Delegate

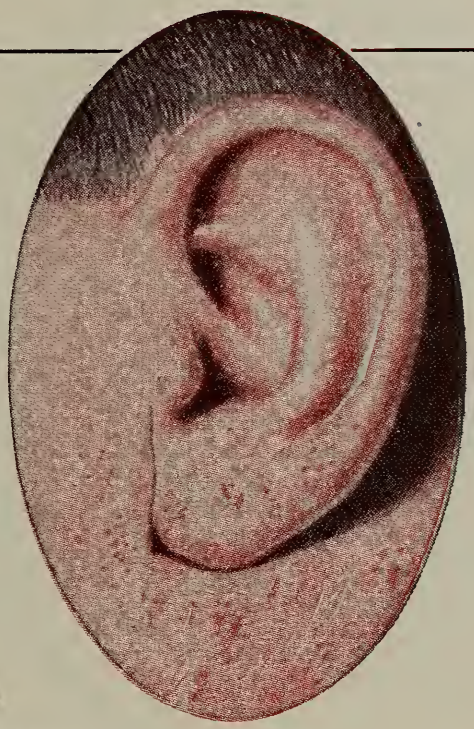
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HIGHLIGHTS OF MID-SUMMER SESSION OF THE COUNCIL

July 16-17-18, 1953

A total of seventy-nine items was considered by The Council at its Mid-Summer Session. Chief in importance were:

- *Group Health and Accident Insurance Study Committee's report,* presented by Chairman W. S. Jones, M.D., Menominee, was approved, with thanks to the hardworking committee; the Chairman was authorized to contact, prior to September 30, 1953, the chairmen of Insurance Study Committees of those Michigan county medical societies known to have existing health and accident insurance plans or to be studying this subject. The Committee was instructed to present its final report to The Council on September 20 so that, if approved, The Council may present it to the MSMS House of Delegates on September 21, 1953, in Grand Rapids.
- *Beaumont Memorial.*—Chairman Otto O. Beck, M.D., indicated that the cornerstone of the Beaumont Memorial would be laid on July 17, 1953, with appropriate ceremonies; he reported that the sum of $31,624.92 had been expended to June 30, 1953, on the erection of the Memorial and that MSMS members and others had donated to the Memorial, to the same date, the sum of $29,746.34.

  Dr. Beck urged a continuation of the campaign to obtain more contributions to (a) defray present costs plus the furnishings; (b) purchase small parcels of land adjoining the Beaumont Memorial in order to give it proper setting; and (c) pay the expense of necessary landscaping.

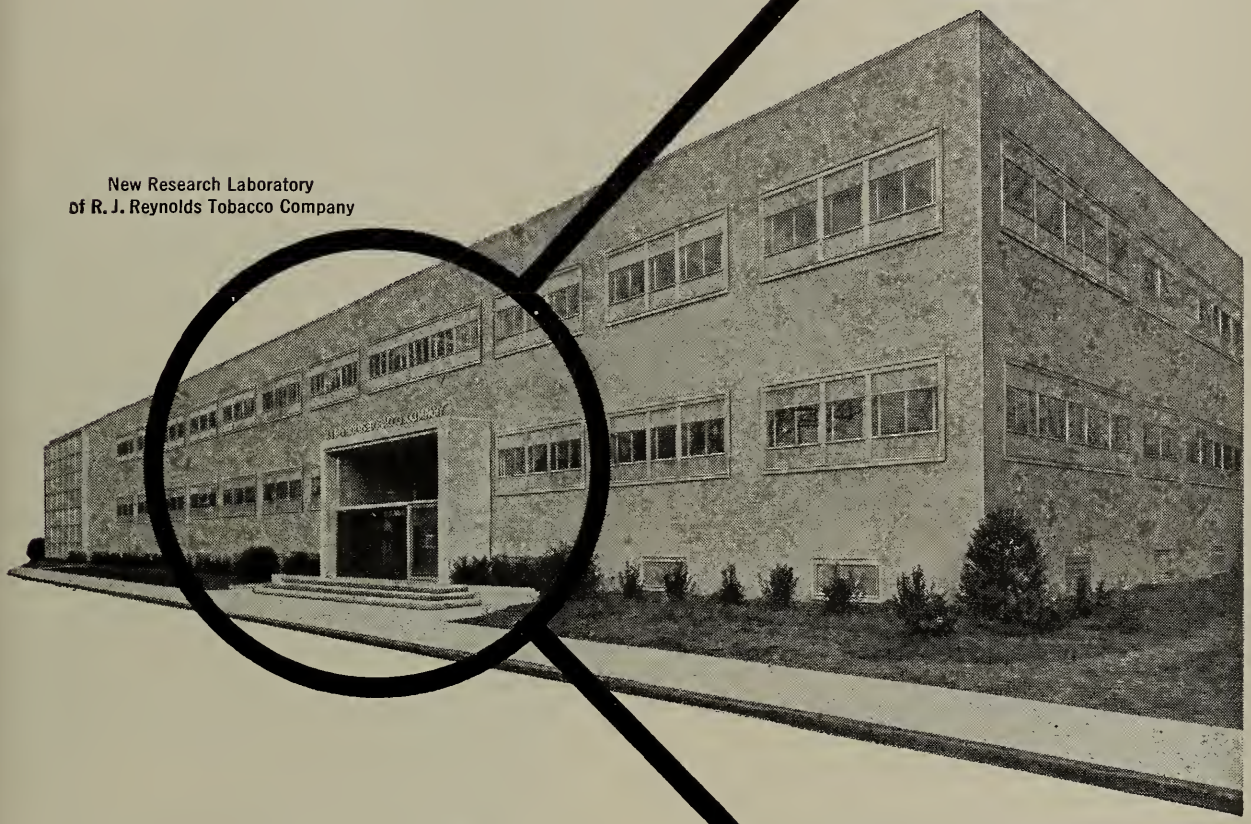
  Grover C. Penberthy, M.D., Detroit, reported that the Michigan Branch of the Association of Military Surgeons of the United States recently had voted that its reserve be contributed to the Beaumont Fund for the needs of the Beaumont Memorial on Mackinac Island. The Association was given a rising vote of thanks for this generous action.
- *Committee Reports.*—The following were given consideration : (a) Medical Advisory Committee to Michigan Hospital Service, meeting of June 30, together with annual report of this Committee which was approved and referred to the House of Delegates for consideration on September 21-22 in Grand Rapids; (b) Beaumont Memorial Working Committee, meeting of July 18; (c) Rheumatic Fever Control Committee, meeting of July 17; (d) Liaison Committee with Michigan Medical Service, meeting of July 18; (e) Publication Committee of The Council, meeting of July 17; Finance Committee of The Council, meeting of July 17.
- *Official MSMS representatives* to attend the Woman's Auxiliary convention and to attend the Michigan State Medical Assistants Society convention, both in Grand Rapids in September, were appointed.
- *All MSMS members* who register at the MSMS Annual Session on September 23, as well as the chiefs of staff of Michigan's 169 hospitals, are to be invited to attend the "Golden Goose Breakfast" of September 24, Pantlind Hotel, Grand Rapids.
- *Monthly financial reports,* including the semi-annual balance sheet covering all MSMS funds were presented, studied and approved.

  The quarterly and semi-annual reports of the Cancer Control Committee were studied and approved.

  Bills payable were inspected and payment authorized.
- *A letter of appreciation* from the Michigan Department, Veterans of Foreign Wars, congratulating the Michigan medical profession on its forward stand in connection with the affairs of veterans, was presented and ordered placed on file.
- *L. E. Himler, M.D.,* Ann Arbor, was appointed to the Advisory Committee to Michigan Social Welfare Commission; William Klein, Hurley Hospital, Flint, was appointed as Michigan Hospital Association representative to the MSMS Emergency Medical Service Committee.
- *The Genesee County Medical Society* members were congratulated on their excellent medical work in connection with the June 8 tornado in and near Flint.
- *The proposed annual report of The Council*—some twelve legal-size mimeographed pages—was presented, discussed in detail, and approved after four major and nine minor amendments, and was ordered presented to the House of Delegates on September 21.
- *Past President Louis J. Hirschman, M.D.,* Traverse City, was welcomed to this session of The Council.
- *A vote of commendation* was ordered placed on the minutes to the State Bar of Michigan on an excellent issue of the *State Bar Journal* (April, 1953, Medical Jurisprudence Number).
- *A joint meeting* was held with the Michigan Health Council Executive Committee to discuss problems of mutual interest including the M.D. Placement Service; the M.H.C. television program "Court of Health"; the regional conferences; and the kinescope, developed at Michigan State College and sponsored jointly by the Michigan Health Council, the Michigan Heart Association and M.S.C.
- *Matters of mutual interest* were discussed with State Health Commissioner A. E. Heustis, M.D., including the status of polio, tuberculosis, local health department finances, and maternal health rules and regulations.

(Continued on Page 924)

PROGRESS THROUGH RESEARCH



New Research Laboratory
of R. J. Reynolds Tobacco Company

The makers of Camels never cease their efforts to maintain and to improve the standards of quality that distinguish America's most popular cigarette.

The plant shown above, which was opened this year, is a $2,000,000 addition to Camel's research facilities.



R. J. REYNOLDS TOBACCO COMPANY • WINSTON-SALEM • N. C.

HIGHLIGHTS OF THE COUNCIL

(Continued from Page 922)

- *A joint meeting* of the MSMS Council was held with the Boards of Michigan Medical Service and Michigan Hospital Service to discuss utilization of the two Services by doctors of medicine.
- *The Public Relations Counsel* presented the following matters: (a) Scripts for three proposed five-minute strip films for TV use; (b) the radio series "Tell Me, Doctor" is still being used in some areas, although statewide distribution has been discontinued; (c) five copies each of four AMA pamphlets will be distributed to all M.D.'s in Michigan, after approval by The Council; (d) plans for press coverage of the Annual Session are being completed, including preparation of routine press releases and the scheduling of a Press Dinner several days in advance of the session.
- *The Council authorized* the Public Relations Committee Chairman and MSMS public relations staff personnel to attend the annual AMA Public Relations Institute in Chicago, September 2-3. County medical societies also were urged to send representatives.
- *Proposed legislation* requiring reporting of cancer by all M.D.'s and laboratories, and reporting of venereal disease by laboratories, will be considered by the House of Delegates in September, by action of The Council.

REPORT OF SUBCOMMITTEE ON INTERN TRAINING AS A MEANS OF PROCURING PHYSICIANS FOR MICHIGAN

H. A. Towsley, M.D., of Ann Arbor, presented a report on medical coverage for Michigan, which indicated that in 1950 there was one physician for every 919 persons, whereas the national ratio was one physician for every 749 persons. The average for the eighty-two counties outside of Wayne, for the year 1950, was one physician for every 1,456 persons, or approximately one-half as many physicians for the people of Michigan outside of Wayne County as a national average. The subcommittee report was read and discussed. It was hoped that the Michigan State Medical Society would take added interest in the intern training program and an active interest in co-operating with the approving of hospitals for intern training, since in order to get residents, it is necessary for hospitals to train interns.

The Committee on Postgraduate Medical Education accepted the report of the Subcommittee on Intern Training as a means of procuring physicians for Michigan and recommended to The Council of the Michigan State Medical Society that it (the Council) endorse the qualifications of an approved internship training program as set forth by The Council on Hospitals and Medical Education of the AMA and that the Michigan State Medical Society encourage all hospitals now approved to fully comply with these requirements.

The recommendation of the Committee was approved and ordered published by The Council.

FELLOWSHIPS FOR BASIC RESEARCH IN ARTHRITIS

The Arthritis and Rheumatism Foundation is offering the following research fellowships in the basic sciences related to arthritis:

1. Predoctoral fellowships ranging from $1,500 to $3,000 per annum, depending on the family responsibilities of the fellow, tenable for 1 year with prospect of renewal.

2. Postdoctoral fellowships ranging from $3,000 to $6,000 per annum, depending on family responsibilities, tenable for 1 year with prospect of renewal.

3. Senior fellowships for experienced investigation will carry an award of $6,000 to $7,500 per annum and are tenable for five years.

The deadline for applications is November 1, 1953. Applications will be reviewed and awards made by February 15, 1954.

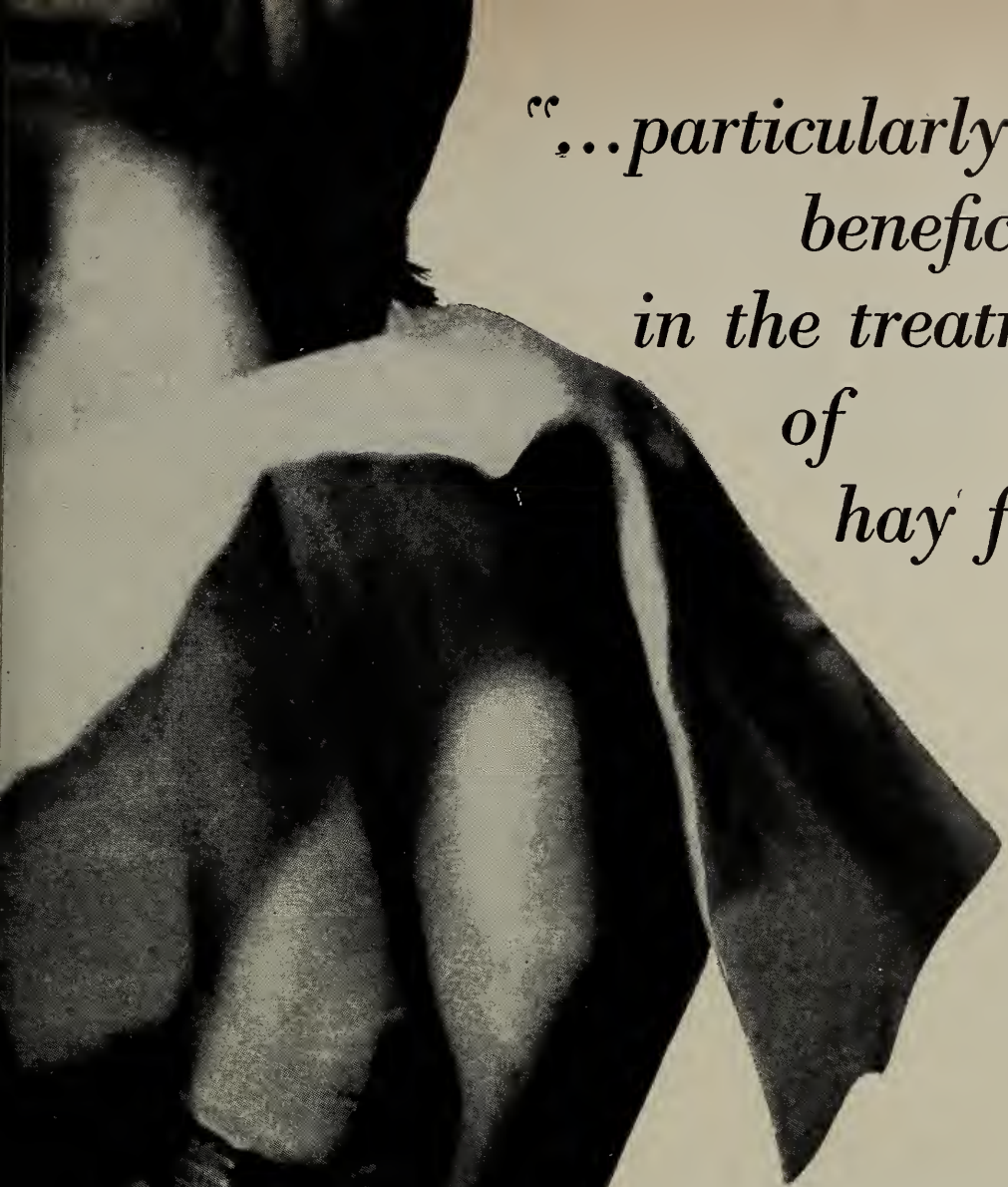
For information and application forms, address the Medical Director, THE ARTHRITIS AND RHEUMATISM FOUNDATION, 23 West 45th Street, New York 36, N. Y.

EXPERT TESTIMONY

At the University of Michigan in Ann Arbor, under the auspices of the Institute of Industrial Health and the School of Public Health, a Conference on Expert and Technical Testimony in Medical and Health Problems will be presented on October 21, 1953.

Many members of the Michigan State Medical Society long have been aware that the quality of both expert and material testimony not always has been of commendable order. Within its own activities and in co-operation with Bar associations frequent effort has been made to improve this undesirable situation. Both the County Medical Society and the State association have inaugurated plans for modified legislation seeking improvement of the physician's services in the courtroom. Various plans have contemplated the provision of panels of known qualified physicians to be indicated by official medical groups; the merits of the Minnesota plan have been appraised; the desirability of provision for "court witnesses" serving both parties in litigation have been mentioned; attempts have been made to apply that well-known legal procedure—"Friend of the Court" to technical testimony such as might confront the physicians. De-

(Continued on Page 926)



"...particularly beneficial in the treatment of hay fever."[1]

Because CHLOR-*TRIMETON*® maleate, chlorprophenpyridamine maleate, has the greatest potency milligram for milligram of any available antihistamine, and because "Chlor-Trimeton has a relatively low incidence of side reactions,"[2] it is a drug of choice for hay fever patients.

CHLOR-*TRIMETON*
maleate

1. Silbert, N. E.: New England J. Med. 242:931, 1950.
2. Eisenstadt, W. S.: Journal Lancet 70:26. 1950.

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EXPERT TESTIMONY

(Continued from Page 924)

spite these efforts and despite the obvious need, little has been accomplished. One of the most unyielding of all customs is legal procedure and convention.

Those mentioned agencies at the University of Michigan likewise are aware of the deficiencies in the court participation of physicians, industrial hygienists and others—not excepting such professional people of the State of Michigan. Without any purpose to instigate modification in laws themselves, this Ann Arbor symposium on October 21 proposes to point out through competent speakers the need for improvement, hoping to accomplish this through education. All this is reflected in the program itself as now appears.

In strains of animals the inherited tendency to acquire cancer can be correlated with the morphology of the endocrine glands.

* * *

How much more effective, though less spectacular, would it be if time, energy, and funds were spent on supplementing, not duplicating, the facilities for cancer detection now available in the physician's offices.

By operating cancer detection clinics as referral centers, by seeking and finding the inadequacies in present-day detection efforts and passing useful information along to doctors, in short, by teaching the doctor rather than by-passing him with a brief nod and going directly to the patient, the cancer detection program can be made to mean something.

* * *

To the doctor who is conscientiously trying to discover early cancer in his patients, the cancer detection center as it is now operating, represents a duplication of effort that contributes little toward the diagnostic problem involved.

* * *

After several years of operation of cancer detection clinics it appears that the effort has been costly and the yield of detections disappointingly low.

MEDICAL MEETINGS AND CLINIC DAYS

A list of known medical meetings and clinic days, sponsored by county medical societies and other physicians' groups in Michigan, follows:

1953

Oct. 7 Clara Elizabeth Fund for Maternal Health and Genesee County Medical Society — Flint

Oct. 21 Michigan Cancer Conference — East Lansing

Autumn MSMS Postgraduate Extramural Courses — Statewide

1954

Mar. 10-12 MICHIGAN CLINICAL INSTITUTE — Detroit

Apr. 14 Genesee County Medical Society Ninth Annual Cancer Day — Flint

May 12 Annual Clinic Day and Alumni Reunion of the Wayne University College of Medicine, Hotel Fort Shelby — Detroit

Additions to this list of meetings are invited by the Editor of JMSMS, in order to make this monthly announcement complete and accurate.

Proposed

BEAUMONT MEMORIAL



"A little from many will build the Beaumont Memorial—a monument to the generosity of Michigan's medical men."—Otto O. Beck, M.D.

Beaumont Memorial Restoration Committee
Box 539, Lansing 3, Michigan

I attach my check in the amount of: $.....
OR
I pledge the amount of: $.....

payable on or before.....
to assist my fellow doctors of medicine of Michigan in building the Beaumont Memorial on Mackinac Island, Michigan.

..... M.D.

.....
street

.....
city state

me questions about filter cigarettes at may have occurred to you, Doctor

and their answers by the makers of Kent

Q: What materials are used in cigarette filters?

A: Until just recently, cellulose, cotton or crepe paper were the only materials used in cigarette filters.

Now, after long search and countless experiments, KENT's "Micronite"* Filter has been developed. It employs the same filtering material used in atomic energy plants to purify the air of minute radio-active particles.

Q: How effective are these cigarette filters?

A: Scientific measurements have proved that cellulose, cotton or crepe paper filters do not take out a really effective amount of nicotine and tars.

However, these same tests also have proved that KENT's exclusive Micronite Filter *approaches 7 times the efficiency of other filters in the removal of tars and nicotine* and is virtually twice as effective as the next most efficient cigarette filter.

Q: Do physiological reactions to filter cigarettes differ?

A: The drop in skin temperature occurring at the finger tip induced by filtered cigarette smoke was measured according to well-established procedures.

For conventional filter cigarettes, the drop was over 6 degrees. For KENT's Micronite Filter, there was no appreciable drop.

Q: Does an effective cigarette filter also remove the flavor?

A: KENT's Micronite Filter . . . the first cigarette filter that really works . . . lets smokers enjoy the full pleasure of a really fine cigarette, yet gives them the greatest protection ever from tars and nicotine.

In less than a year's time, the new KENT has become so popular it outsells brands that have been on the market for years.

• • •

References Cited

a. *J.A.M.A.*, Vol. 103, 1934, p. 318
b. *J.A.M.A.*, Vol. 135, 1947, p. 417

takes out up to 7 times more nicotine and tars—

leaves in full, rich tobacco flavor.



Cancer Comment

PROGRESS IN CANCER CONTROL

Harry M. Nelson, M.D.
Detroit, Michigan

Skeptics within the medical profession have ceased to disparage the very real progress which has been made in the control of cancer. The pessimism which prevailed in the recent past is necessarily evaporating before incontrovertible evidence at hand that cancer can be treated successfully and that patients can, within an acceptable definition of the term, be cured of their disease.

Early diagnosis is the present answer to cancer control, and early diagnosis is the responsibility of the patient and of the first physician he consults. That early diagnosis is practical and feasible has been proved, and yet patients with advanced cancer are still being treated symptomatically by the "watch it and wait" technique which is so disastrous. Types of cancer which can, today, be found early enough to justify vastly increased hope of cure include tumors of the oral cavity and of the skin, the cervix, lung, rectum and breast. Nearly 60 per cent of cancer deaths among women and about 25 per cent of cancer deaths among men are due to malignant disease occurring as a primary lescion in one of the above six easily accessible sites. Cancer originating in these sites presents these features:

1. Each is susceptible of discovery while it is small and asymptomatic.
2. Each has a high rate of curability when properly treated early. Given the condition of a small asymptomatic localized lesion and adequate treatment, cancer of the uterine cervix could be cured four times as often as is now generally the case; cancer of the lung and of the rectum, five times as often, and cancer of the breast might be cured twice as often as it is today. The public is aware —some critics say too aware—of the threat of cancer to the individual, of the disruption of family life it brings and of the magnitude of the economic and social problem of advanced cancer. Just as soon as physicians generally adopt a more aggressive and hopeful attitude toward the disease, just so soon will they begin to look for, and find, early, curable cancer. The techniques are not formidable and the rewards are incalculable.

In this brief note on cancer control, it is not possible adequately to summarize the solid advances which have been made along the research front. Discounting the exaggerations of uncritical reporters, it is nevertheless possible to state conservatively that tremendous progress has been made which promises greatly increased comfort, palliation and indeed temporary reversal of some cancers in those patients whose disease is for one reason or another not amenable to extirpation or irradiation. Newer forms of irradiation are being widely employed, as are more precise methods for measuring radiation dosages and for controlling damage done to normal tissue when cancer receives large amounts of irradiation.

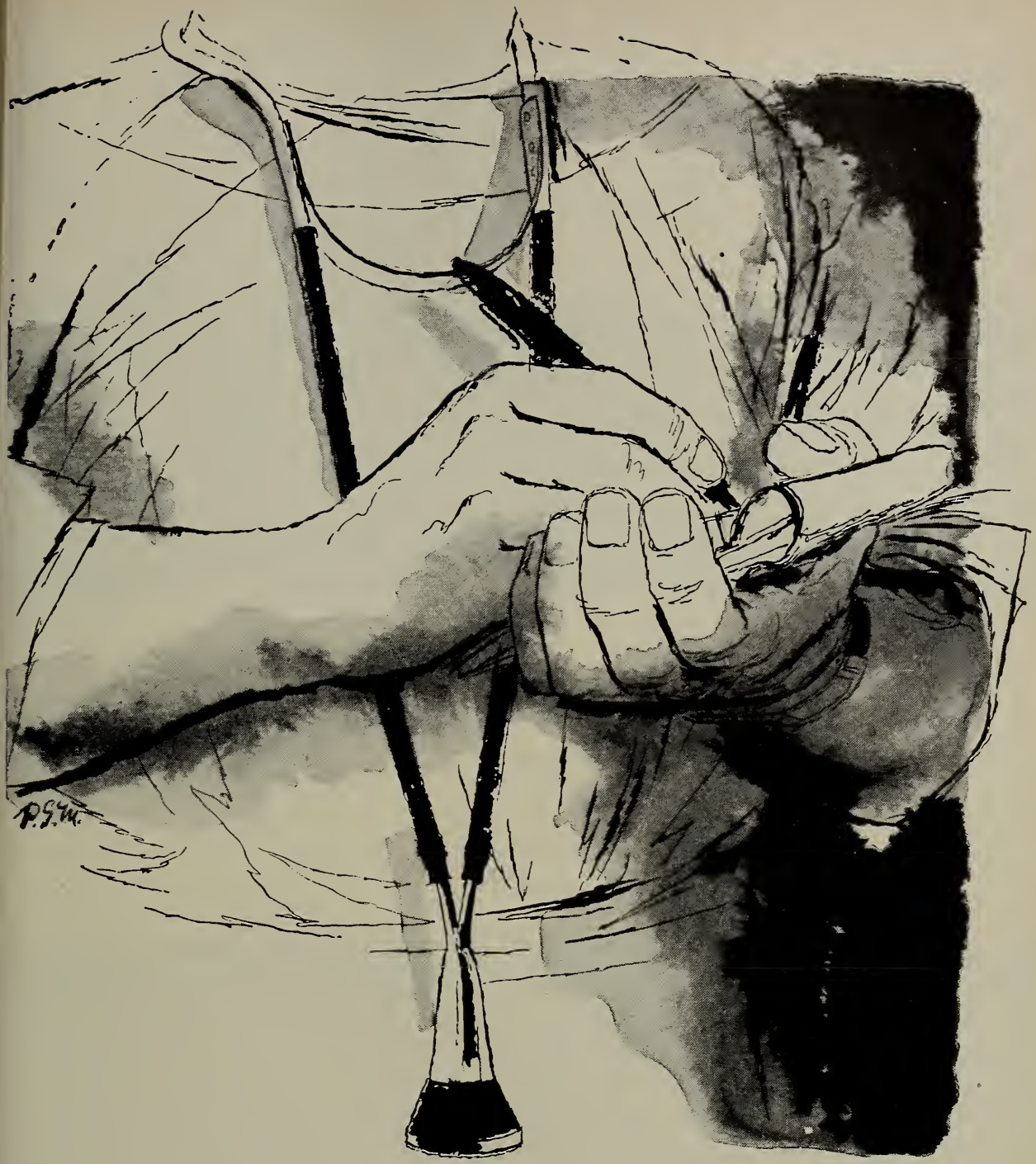
Not new, perhaps, but of increasing importance is the control of cancer being achieved through hormone therapy. Breast and prostate cancer respond well and for prolonged periods of time to estrogen and androgen therapy, and very recent reports indicate that it may soon be possible to reduce distressing side effects which sometimes accompany such treatment. Adrenalectomy for advanced cancer of the breast and prostate and for a few other cancers, is receiving careful evaluation, and has, in the reports of some investigators, been effective in temporarily relieving symptoms of about one-half the patients so treated. Still more daring has been the experimental trial of hyphophysectomy. Viruses have been found which destroy cancer. Their use for the treatment of human cancer is still limited but it is probable that the usefulness of these agents in cancer therapy will be increased. The field of chemotherapy is expanding, and animal and human trial of new agents proves continually rewarding to the researcher and, most important, frequently to the patients. Consider acute leukemia in children which now is amenable to treatment with antifolics complemented or not by ACTH and cortisone. Worthwhile remissions have occurred for many of these children, and some are alive and apparently leading almost normal lives twenty-four and thirty-six months after the onset of symptoms.

An attitude of pessimism with regard to cancer control is no longer warranted. True, the answers to all the questions are not yet known, but perhaps we have reached that stage in our progress where the momentum generated by a vast accumulation of hard won knowledge is sufficient to overcome the interia which has for so long hampered the advance toward cancer control.

While great, new discoveries have been made

(Continued on Page 1021)

Dr. Nelson is president of the American Cancer Society, Inc.



When your ears tell you that a patient may be "caffein sensitive," he doesn't have to give up drinking coffee. He only needs to give up drinking caffein. Why not suggest Sanka Coffee—97% caffein-free?

New, extra-rich Sanka is a wonderful coffee, Doctor. You'll enjoy it yourself.



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DELICIOUS IN EITHER INSTANT OR REGULAR FORM

PR REPORT

"Automatic PR" in Flint

Often the best public relations practices, when analyzed, are no more than day-to-day good citizenship and the acceptance of civic responsibilities. This holds true in Medicine, as in many other fields.

A dramatic example is the splendid action of the Genesee County Medical Society following the June tornado disaster near Flint. This was no planned public relations project, and as a matter of fact the gesture received a minimum of publicity, but it represents public relations practice on a high plane.

Perhaps a portion of a report from the impartial *Flint News-Advertiser* of June 19 best tells the story:

"Tornado victims will benefit three ways from the generosity of local doctors.

"At a meeting of the Genesee County Medical Society Sunday, it was decided that the medical men, many of whom worked around the clock in the days following the disaster, would donate all services to the stricken persons.

"It also was decided that the Medical Society would contribute $5,000 from its treasury to the Red Feather Tornado Fund.

"Finally, many of the doctors at the meeting said they would donate all fees paid by health and medical insurance companies for disaster victims to the Red Feather Fund as personal contributions.

"The action of the group won widespread public approval when it was announced yesterday. It will write off thousands of dollars in medical fees to persons injured in last week's twister.

"Hundreds of persons were treated in hospitals and immediately released, but scores were hospitalized for longer periods. Some cases are expected to require medical and surgical care for several months, and services in such cases also will be donated by doctors."

PR Committee Looks Forward

Public Relations Committee members came up with a number of new ideas and suggested refinements of current PR projects, during the annual summer meeting held in Owosso Sunday, August 2. Basic idea of the 1954 program is "Winning Friends for Medicine."

Receiving special attention were several suggested new avenues leading to closer relationships and better understanding between news media and the individual M.D. or medical organization. Groundwork on at least two, which would operate at the county level, will begin immediately.

The format for a new fall television series in Detroit, combining films and a panel of medical representatives, was discussed. Final arrangements are awaiting clearance of suitable time by the TV station.

Increased educational activity in Michigan's public schools was suggested, with new emphasis on High School newspapers and wider distribution of MSMS health films.

Plans for the MSMS exhibit at the Michigan State Fair were completed, using the attractive display first introduced at the Michigan Clinical Institute in Detroit last March.

Means of building greater distribution for worthwhile pamphlets on medical and health subjects were considered. Members of the Michigan State Medical Assistants Society, already a great help in the past, may be invited to give a helping hand in this field.

Several major proposals are being given further intensive consideration by the Committee. These include a National Health Film Festival (which would be a Michigan "First"), and a conference of lay personnel working in the health field—with MSMS as the sponsor—to co-ordinate health PR activities in Michigan and to promote understanding of current medical practices and advances.

Another proposal under scrutiny is a conference to bring the state's top medical researchers and scientists together with science writers in a series of periodic conferences to discuss the current status of research in various medical fields. This would be designed to give the writers accurate background and resource material for future developments, as well as give them the true picture of the dramatic work being carried on every day by doctors of medicine in Michigan laboratories, universities and colleges.

New Film Hits Obesity

"Cheers for Chubby," an eight-minute color cartoon using the light approach to explain why and how overweight persons should reduce, is being shown in theaters throughout Michigan.

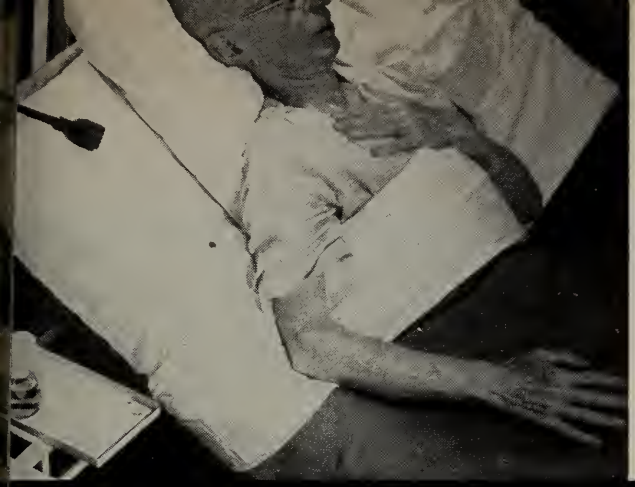
The film was produced in Hollywood for Metropolitan Life Insurance Co., with the co-operation of AMA and the U. S. Public Health Service. It has great entertainment value in addition to its health message. MSMS is urging the use of this picture along with other major health organizations in Michigan.

New PR Associate

Newest member of the MSMS staff is A. DeWitt Brewer, Associate Public Relations Counsel. Formerly Public Relations Director of the Grand Rapids Chamber of Commerce, and later of the Grand Rapids Community Chest, Mr. Brewer joined MSMS in mid-July, replacing John B. Kantner who resigned to join The Jam Handy Organization as a creative writer.

Before and immediately after World War II, Mr. Brewer was a newspaperman in Mount Clemens and Battle Creek. He holds degrees from Albion College (A.B.) and Northwestern University (M.A.)

In addition to his duties at MSMS headquarters in Lansing, the new PR associate will serve as Field Secretary to the ten counties in the Second and Eighth Councilor Districts.



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BRAND OF OXYTETRACYCLINE

an agent of choice in urinary tract infections

- *promptly effective against a broad-spectrum of urinary pathogens*
- *high concentration in active form in urinary tract*
- *well tolerated, even upon prolonged administration*

Terramycin is acclaimed by urologists everywhere for unsurpassed action in

chronic urinary tract infections

acute urinary tract infections

urinary tract surgery

"The resistant cases showed remarkable response."[1]
". . . has cured where all other antibiotics have failed."[2]

"Patients with pyelitis were well and doing their usual duties within 24 hours . . ."[3]

"Morbidity from apparent genito-urinary causes was noted in only one patient of 44 patients who received prophylactic Terramycin."[3]

"Terramycin is generally well tolerated, the percentage of relapses being low and the percentage of bacteriological as well as clinical cures high."[2]

1. Ferguson, C., and Miller, C. D.: J. Urol. *67*:762 (May) 1952.
2. Trafton, H. M., and Lind, H. E.: Ibid. *69*:315 (Feb.) 1953.
3. Blahey, P. R.: Canad. M. A. J. *66*:151 (Feb.) 1952.

Pfizer

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DIVISION, CHAS. PFIZER & CO., INC.

Michigan Registrations in Medicine

The following Doctors of Medicine have been granted licenses in Michigan, Numbers 20,221 to 20,275, inclusive.

By Endorsement.—Walter Anderson Payne *(Pennsylvania)*, Mary Frances Brown *(Pennsylvania)*, George Edman Scheer *(Kansas)*, Robert James Sillery *(Maryland)*, Edward William Green *(Virginia)*, Philip Bruce Lockhart *(National Board and Special Examination)*, Murray Leonard Nusbaum *(Ohio)*, Gerd Tobias Schloss *(Connecticut)*, Harold H. Niekamp *(Illinois)*, David Harkness Black *(Pennsylvania)*, William Mitchell Mikkelsen *(Missouri)*, John Henry Spencer *(National Board and Special Examination)*, Richard Hirst Howell *(Ohio)*, Daniel Graham Tanner *(Ohio)*, Walter Freemon Larrabee, Jr. *(Minnesota)*, Jefferson Davis Kernodle *(Virginia)*, Fred Waite Whitehouse *(National Board)*, Julius Rutzky *(New York)*, Marshall I. Hewitt *(Indiana)*, Richard Hobert McDonald *(Maryland)*, Edward Joseph Miles *(Illinois)*, Elizabeth Jones *(New Jersey)*, Karl Klokke *(Illinois)*, Luman Wm. Bromley *(Indiana)*, Wm. Henry Benner *(Illinois)*, Robert Harry Ambrose *(Illinois)*, Charles E. Conaway *(Indiana)*, Lacy John Salan *(Pennsylvania)*, Joseph Paul Abraham *(Ohio)*, Clarence S. Livingood *(Pennsylvania)*, James Dana Darnley *(National Board and Special Examination)*, John Philip Ludwick *(Illinois)*, Edward H. Whitelock *(Missouri)*, Robert Alfred Schimek *(Maryland)*, William Edward Chase *(Illinois)*, Duane Llewellyn Block *(Wisconsin)*, Christopher Howard Southwick *(National Board and Special Examination)*, Nicholas Steiner Gimbel *(National Board and Special Examination)*, Jack Carl Smith *(Texas)*, Adolph Walter Suksta *(Maryland)*, John Hal Doran *(Kentucky)*, Robert G. Stone *(Maryland)*, Edward Larston Farrar, Jr. *(Georgia)*, Henry Stanley Bennett *(National Board and Special Examination)*.

By Examination.—Warren J. Roberts, John Lewis Wilson, John V. Corbett, Robert Lester Weiner, Frank Talarico, Bernard Anthony O'Hora, Harold O. Conn, Ralph Orace Dunn, Jr., Minnie Singer Steinhauer, Donald Edgar Kilgore, Jr., William Warren Wilkinson.

The following Michigan Doctors of Medicine were certified to the states named during the period, February 13 to April 22, 1953:

Jon Erickson Rosell, Washington; Franklin Henry Top, Iowa; Henry B. Larzelere, Ohio; John Anderson Stedelin. Illinois; Lorin Edgar Kerr, Jr., District of Columbia; William B. Fast, Pennsylvania; Ralph M. Silas, Colorado; Gurdon S. H. Pulford, California; Leo B. Saraf, California; James H. Wible, Pennsylvania; Offley Jackson Shore, Montana; Charles Donald Fees, Ohio; Samuel C. Houston, California; Samuel C. Houston, Utah; Henry B. Larzelere, New York; Albert Rome, Illinois; Harold W. Jaffee, California; Eldon Turley Perry, New York; Merle Arnt Haanes, Ohio; Paul Ruben Kempf, Jr., California; Hodge Northrup Crabtree, California; Robert Allen Davison, Tennessee; Philip Brown Porter II, Oregon; Robert James Saunders, California; George Agzarian, California; Leonard J. Hahne, California; Leonard J. Hahne, Illinois; Donald Cole McLean, Minnesota; Warren Skillman Wallace, Georgia; William A. Sodeman, Missouri; James Thomas McGuckin, New Mexico; William L. Foust, South Carolina; Hodge N. Crabtree, California (Lost previous certification); John J. Hartman, California; Carl H. Mobert, Ohio; John Edwin Scott, North Carolina; Victor Theodore Scoville, Ohio: Victor Theodore Scoville, Iowa.

BEAUMONT MEMORIAL CORNERSTONE LAYING

State Senator Creighton R. Coleman was one of three speakers at the cornerstone laying of the Beaumont Memorial at Mackinac Island.

The memorial, complete with a reconstructed trading post, will be built on the vacationland spot where 131 years ago, Dr. William Beaumont, a young army surgeon, and his famous "open window" patient made medical history. The patient, Alexis St. Martin, was the victim in 1822 of an accidental shotgun discharge that left a large hole in his stomach.

Dr. Beaumont kept St. Martin alive, but was unable to close the wound. So, through it he made a detailed study of digesting every type of food, the effects of liquor, the influence of emotions on the digestive processes.

Dr. Beaumont's discoveries rank with the greatest in the medical profession. Since that time, his medical findings have been confirmed by x-rays and other laboratory apparatus.

Speaking of Dr. Beaumont's experiment, Senator Coleman said, "On this very spot, he met an opportunity, seized it, and with persistence, courage and intelligence succeeded in leaving for the human race a longer, healthier and therefore a better life."

"In an age which places such a high premium upon destruction and death, it is deeply gratifying to commemorate the life and achievements of Dr. Beaumont. He represents the peaceful and constructive pursuit of scientific knowledge, particularly that pertaining to the diagnosis, cause and cure of man's ills. Certainly, the highest goal of human science is that of preserving life and the cure of disease, the broken body and the maladjusted mind," he told his audience.

The State Medical Society expects to spend $40,000, contributed by Michigan doctors, on the memorial. When it is completed, it will be presented to the Mackinac Island commission as a permanent tribute to the famous doctor and patient.

The land on which the trading post and monument stands was presented to the society by Parke, Davis & Co.

Dr. R. J. Hubbell of Kalamazoo, president of the Michigan Medical Society, and Dr. Otto O. Beck of Birmingham, head of the memorial fund drive, presided at the cornerstone-laying ceremonies this afternoon. Other speakers, in addition to Senator Coleman, were Dr. William Bromme of Detroit, chairman of the Michigan State Medical Society council and W. F. Doyle, chairman of the Mackinac Island Commission.—*Battle Creek Enquirer News*, July 17, 1953.

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Editorial Comment

STATE MEDICINE AND MR. EDEN

Anthony Eden, the British foreign secretary, who underwent an operation June 10 in a Boston hospital, is scheduled to fly back to London soon. His surgeon has reported that complete recovery is assured.

We rejoice in the foreign secretary's return to health and in the wisdom he displayed in coming to the United States for medical treatment. Government medicine, as practiced in Britain, obviously must not be good enough for high officers of the government.—Editorial, *Chicago Tribune*, July 24, 1953.

COSTLY MOTHBALLS

An army decision to close Percy Jones Hospital in Battle Creek once again undoubtedly will help to save defense funds in the near future. But there is a larger question of how much the taxpayer will benefit in the long run by the expensive process of reopening and closing the big institution as military emergencies dictate.

Many Detroit organizations and others throughout the State volunteered money and furnishings for the hospital during the last war, only to be called on to re-equip it once more when Percy Jones was reopened in 1950.

During the controversy over disposition of the hospital when the first closing was announced in 1949, too little attenion was given by Washington officials to a permanent plan for utilizing this valuable public investment. Veterans Administration officials backed away from taking it over. But the Federal Government refused to release it when Michigan officials were interested in converting it to a State mental hospital.

Hospital space of all kinds is sorely needed. This 25-million-dollar installation, originally built as the famed Kellogg Sanitarium and later modernized by the Army, is too valuable to be left to the changing whims of Washington bureaucrats.—Editorial, *Detroit Free Press*, Aug. 3, 1953.

THE PROBLEM OF THE "HOPELESS" CASE

. . . The purpose of the practice of medicine is to offer aid to the ill. No physician is ever expected to do more than he is able, but each physician is expected to do his best. When his best is followed by death, he does not become a poor physician, but when less than his best effort is offered, he has become a poor physician whether cure or death results. When his best effort has no apparent chance of success, his patient need not lose hope any more than anyone need lose the same home; because, for each, this present sojourn must end in death. Consideration of life without death is as impossible as that of life without birth.—Calvin T. Klopp, M.D., in *Medical Annals of the District of Columbia*, July, 1953.

ONE OF TWENTY EMPLOYED BY GOVERNMENTS

The Census Bureau reported today that 7,105,000 persons work for the Federal, state and local governments. This is a ratio of one government worker for every twenty men, women and children in the nation.

More than one-fourth are teachers or hold other educational jobs. Nearly one-fifth are civilians working for Federal defense agencies.

For every 1,000 persons in the country, there were fifteen civilian Federal employes and twenty-nine state and local workers when this report was compiled last October.

The number of Federal workers and the rate of their pay changed little from October, 1951, to October, 1952, the report said. But the number of state and local workers rose 5.5 per cent higher than a year earlier.

In October, there were 2,400,836 civilian Federal workers, 1,103,441 state government workers and 3,418,263 employed by local governments.

Broken down by the job they hold, 1,883,000 of the 7,105,000 Federal, state and local government employes are in education, 1,309,000 in national defense, 589,000 in health and hospital work, 525,000 in the postal service, 460,000 in highways, 291,000 in natural resources, 254,000 in police, 174,000 in fire protection, 122,000 in public welfare and 1,497,000 in all other classifications.

Total public payrolls for the twelve months ending last October amounted to more than $22,000,000,000, of which $10,000,000,000 went to Federal workers, $3,000,000,000 to state workers and more than $9,000,000,000 to local workers.

Earnings for full-time state and local government employes averaged $281 in October, compared with $264 a year earlier. They ranged from less than $200 in Arkansas and Mississippi to $320 or more in California, New York and Michigan.—*New York Times*, May 11, 1953.

More men seventy to seventy-nine years of age die from intestinal cancer than do men between sixty and sixty-nine, although there are 26,000 fewer men per 100.000 population living in the older group.

* * *

There now exists in private practice a necessity for an almost universal improvement in surgical technique in connection with the diagnosis of carcinoma *in situ* of the cervix.

The JOURNAL

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Arthritis Foundation Begins Fourth Year

By H. J. McLaurin

Detroit, Michigan

THIS LAST year for the Michigan Chapter, Arthritis and Rheumatism Foundation, has been mainly one of consolidating our operations—of more meetings of our Board of Directors and Executive Committee, of better communications between all of us active in running the Chapter, including our state-wide Medical Advisory Committee, of more widespread educational work through radio, TV and the showing of our film on arthritis, and through a greater number of talks by our medical director. I believe our Chapter is today more tight-knit than at any previous time, and therefore more efficient.

Before I exemplify just what I mean by the foregoing thought, I wish to pay tribute to the memory of Mr. Henry T. Ewald, our former Chapter Chairman, who did yeoman service in helping organize the Chapter and in guiding it through its early days. He was a tower of strength in getting us into the United Health and Welfare Fund of Michigan, Inc., and gave generously of both his time and money to our Chapter. We all deeply mourn his loss.

We are particularly pleased with our home care work with arthritis through the Visiting Nurse associations in ten Michigan cities. This work is for "home-bound" arthritics and is given by nurses trained in physical therapy, under the direction of the patients' doctors. Patients able to do so, pay, in whole or in part, while our Chapter takes care of the deficits.

This arthritic service is now being rendered in Metropolitan Detroit, Grand Rapids, Flint, Pontiac, Bay City, Lansing, Port Huron, Saginaw, Marquette and Ypsilanti. During this last fiscal year we spent approximately $30,000 on this service and have earmarked a maximum of $36,000 for the current fiscal year.

To clarify this service for patients, patients' doctors, and our visiting nurse groups, we prepared a little booklet which is being distributed to them. This booklet stresses the fact that the visiting nurse works for the patients' doctors, and it is the function of these doctors to prescribe the type of treatment and specify the frequency of therapy needed. It also stresses the fact that those able to pay should do so, that cases are evaluated from time to time for frequency of treatments, and that home treatment is available whether the patient is under the care of a private physician or a clinic.

We also inaugurated last May a monthly, one-sheet newsletter. This letter is sent to our Board of Directors, our Medical Advisory Committee whose membership is scattered throughout the state, National Arthritis, United Health & Welfare Fund of Michigan, Inc., and United Foundation of Metropolitan Detroit. This is an inexpensive activity, yet, it serves to keep all of us interested in this work informed on our current operations, with the net result that we have more time at our Executive and Board of Directors meetings for the more important projects.

Our research projects in Michigan medical schools and hospitals which receive the bulk of our grants-in-aid continued this last year at about the same level as previously and will continue at about

(Continued on Page 966)

Mr. McLaurin is Chairman, Michigan Chapter, Arthritis and Rheumatism Foundation.

Arthritis Research in Michigan

IV. Rehabilitation Stressed by Arthritis Foundation

By J. J. Lightbody, M.D.

Detroit, Michigan

THIS ISSUE of the JOURNAL of the MICHIGAN STATE MEDICAL SOCIETY will mark the fourth year that the Arthritis Foundation has assisted in the publication of articles devoted entirely to the subject of arthritis and allied diseases. We wish to thank the editor, Dr. Wilfrid Haughey, and also the Council of the Michigan State Medical Society, for allowing us the annual privilege of collecting and publishing material which, we believe, is of great timely interest to physicians in the State of Michigan.

For the past three years, there has been a considerable increase in the amount of interest in the field of Arthritis, and, because of this, there has been an increasing amount of basic and clinical research work promoted in the state, much of which has been assisted financially by the Arthritis Foundation.

The discovery of cortisone and ACTH about four years ago, had a great deal to do with the increased interest in arthritis, particularly the rheumatoid type, but the use of these hormones has now found their particular place in treatment, and this has caused a leveling off of interest in the hormone therapy research field. However, during the past year, there has been a number of new drugs which have been made available for clinical research, and several of the projects which have been assisted by the Foundation are investigating the possibilities of clinical application of these drugs.

During the past year, a new field of service to the disabled arthritic person has opened up, and the word "Rehabilitation" has been revived so as to include a complete program for those patients who are particularly amenable to this long-term type of treatment. The program of rehabilitation for an arthritic would include the combined activities of general medicine, orthopedic surgery, physical therapy, occupational therapy, and psychotherapy. This necessarily demands a co-ordinated team of physicians and therapists, who must combine all accumulated knowledge of the treatment of the arthritic, and apply this information directly to an arthritic in an attempt to bring about the greatest amount of improvement to put the patient in a state of self-sufficiency.

There are a great number of very advanced arthritics who have completely ankylosed joints and marked atrophy of muscles and general debility and, in some cases, co-incidental diseases such as heart or kidney conditions—so that these individuals are not considered candidates for a program of rehabilitation. It is necessary, before treatment is begun, to determine what amount of salvage material is present in the patient, and what could be expected of this person at the end of an extensive program of rehabilitation.

There are several hospitals in the state where excellent physical therapy departments have been developed, but there still continues to be a marked shortage of physiatrists and physical therapists and until this situation is corrected, the arthritic will continue to receive only the minimum of attention.

During the past year, the Arthritis Foundation has begun arthritis rehabilitation programs at Harper Hospital and at the University of Michigan, and these will be continued during the coming year. A program of arthritis rehabilitation has also begun at Henry Ford Hospital, which will be assisted through the Foundation.

Home Care Program

For the past two years, through the co-ordinated efforts of the Visiting Nurse Associations and the Arthritis Foundation, there has developed a program of home care to the disabled arthritic which includes general nursing care and physical therapy. Most of the visiting nurse associations throughout the state are taking part in this program so that all disabled arthritics at home now have the opportunity to have this type of service. At the present time, the visiting nurse services are available in the following cities of the state: Bay City, Detroit, Flint, Grand Rapids, Lansing, Marquette, Pontiac, Port Huron, Saginaw, and Ypsilanti.

The visiting nurse takes orders from the physician in charge of the case and may give injections of medication along with other services. The Arthritis Foundation has assumed the deficit cost of this program in those cases where the fee of the

Dr. Lightbody is Chief of Arthritis Clinics at Harper Hospital, Detroit Receiving Hospital, and Medical Director of the Michigan Chapter, Arthritis and Rheumatism Foundation.

visiting nurse is not paid by the patient, or by other agencies. At the end of each month, each visiting nurse association sends a report to the business manager of the Foundation on those cases which have been treated the previous month. When the physician asks the visiting nurse to give a certain type of treatment at home, he should also specify the number of treatments per week, plus the length of time the patient should receive therapy. This time element is necessary so that there may be more frequent professional contacts between the visiting nurse and the physician in charge of the case, as some of the disabled arthritics continue to have extensive home treatments with a minimal of medical observation.

Research Projects

The Board of Directors of the Foundation, on recommendation of the Medical Advisory Committee, have approved the continuation of research and rehabilitation projects at the following places for the coming year:

University of Michigan
Wayne University—Department of Anatomy
Receiving Hospital—Department of Medicine
Receiving Hospital—Department of Radiology
Harper Hospital
Henry Ford Hospital

The research work at the University of Michigan is conducted by Dr. William D. Robinson, and Dr. Ivan F. Duff. During the next year, the arthritis research will be conducted in the new Medical Research Building, where there has been complete reorganization of facilities. The arthritis research at this institution includes the continuation of the work on the fundamental characteristics of connective tissue, which is very closely related to the collagen diseases.

Dr. Ernest Gardner, Professor of Anatomy, Wayne University, proposes to continue the study of connective tissue in the early stages of formation, particularly in the embryo and fetus, with special reference to the development of joint structures and synovial fluid. Dr. Gardner was one of the few guest essayists invited to speak at this year's meeting of the American Rheumatism Association, at which time he presented his investigative work in relation to certain phases of blood supply to synovial tissue.

The Receiving Hospital Arthritis Clinic will be assisted this year by the Foundation with the appointment of a full-time Fellow in Arthritis, whose chief duties will be the complete diagnostic work-up and treatment of arthritic patients in the wards and out-patient department of Receiving Hospital. This Fellow will also be responsible for any clinical investigation in arthritis under the direction of the Staff.

Dr. William Q. Wolfson, Department of Medicine, Receiving Hospital and Wayne University, will continue an investigation of gout. Dr. Wolfson has done an extensive amount of research work in this field already, and has made many contributions to the knowledge of this disease. His particular interest during the coming year will be a general investigation of the endocrine aspects in relation to the onset of the acute attacks of gout.

Dr. James E. Lofstrom, head of the Department of Radiology of Receiving Hospital, Wayne University, will continue his work on the experimental production of arthritis in animals, and also to study the experimental production of aseptic necrosis of hip joints. Microradiographic studies are being utilized following the injection of opaque material into blood vessels.

The Arthritis Rehabilitation Committee of Harper Hospital will continue their program of rehabilitation, which was begun last year. This group is choosing a relatively small number of individuals who, they believe, are good candidates for an extensive program of treatment. This group will also investigate certain new drugs which are used directly in the treatment of arthritics on a clinical level.

Dr. O. H. Gaebler, head of the Biochemistry Department of the Edsel B. Ford Institute for Medical Research, is planning to continue his work on filter paper electrophoresis in relation to the study of plasma proteins in arthritis, in addition to the study of N^{15} labeled glycine.

The Arthritis Division of Henry Ford Hospital headed by Dr. Dwight C. Ensign, will initiate a program of rehabilitation in a certain number of selected arthritic patients.

Dr. Earl A. Peterman, Providence Hospital, has been doing a considerable amount of work on the investigation of glucuronic acid and glucosamine, which are two of the main constituents of fibrous tissue. He has also studied the effect of prolonged administration of Heparin on the blood and on the clinical signs and symptoms of the arthritic patient.

Arthritis Clinic to Have Full-Time Social Service Worker

The Foundation will assist the Arthritis Clinic at the University of Michigan Hospital, by assuming the cost involved in the services of a full-time social service worker who will devote her entire attention to arthritics. Social service workers are quite indispensable in large arthritis clinics, and assist greatly in the social readjustment of the patients. In order that medical treatment may be as effective as possible, it is important that it be supplemented by the services of a social worker trained and experienced in medical service case work. This social service worker, assigned to the arthritis clinic, helps to educate the patient and the families to meet the conditions and limitations imposed upon them by their handicaps, and arranges, where indicated, for special nursing care at home, for vocational guidance, or occupational rehabilitation, also aids in the follow-up of patients for continued medical supervision.

New Members of Medical Advisory Committee

There have been five new members appointed to the Medical Advisory Committee of the Foundation, to serve for the coming year:

Dr. Chester H. Adams.....Flint
Dr. A. James French.....Ann Arbor
Dr. James A. MacDonell.....Grand Rapids
Dr. Albert E. Quarton, Jr.....Royal Oak
Dr. James W. Rae.....Ann Arbor

The Medical Advisory Committee is composed entirely of physicians throughout the state, who meet several times a year to discuss the various applications for grants-in-aid from hospitals and clinics. Proper state-wide geographic distribution of this committee is being made so that sufficient community representation and interest may be obtained.

The Michigan Chapter, Arthritis and Rheumatism Foundation, will have an exhibit at the 1953 Annual Session of the Michigan State Medical Society to be held in Grand Rapids, September 23-24-25. Included in this exhibit will be a sound film on the general subject of Arthritis, in addition to a variety of types of photographs of the various arthritides.

During the past four years, the Arthritis Foundation has been very fortunate in having the valuable services of Mr. H. J. McLaurin, General Agent of the Aetna Life Insurance Company of Detroit, and Mr. W. A. Moffett, Vice President of Campbell-Ewald Company. The other members of the Board of Directors have given freely of their time to conduct the business of the Foundation, and have assisted greatly in an effort to make more medical services available to a greater number of arthritic patients and in the promotion of research in this field.

The Michigan Chapter of the Arthritis and Rheumatism Foundation is supported entirely by the United Health and Welfare Fund of Michigan, Inc.

Michigan Chapter Arthritis and Rheumatism Foundation

7338 Woodward Avenue Detroit 3, Michigan

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The Prevention of Rheumatic Fever

RHEUMATIC Fever is a recurrent disease which can be prevented. It is now generally agreed that both the initial and recurrent attacks of the disease are usually precipitated by infections with beta hemolytic streptococci. Therefore, the prevention of rheumatic fever and rheumatic heart disease depends upon the control of streptococcal illnesses. This may be successfully accomplished by (1) early and adequate treatment of streptococcal infections in all individuals and (2) prevention of streptococcal infections in rheumatic subjects.

I. Treatment of Streptococcal Infections

In the general population at least 3 per cent of untreated streptococcal infections are followed by rheumatic fever. Among certain individuals, especially those with previous rheumatic fever, the incidence is much higher. Adequate and early penicillin treatment, however, will prevent most attacks of rheumatic fever and eliminate streptococci from the throat.

A. *Diagnosis of Streptococcal Infections.*—In most instances it is possible to recognize streptococcal infections by their clinical manifestitations but laboratory tests may assist in establishing the diagnosis.

1. *Epidemiology.*

The seasonal pattern and presence of similar cases in the community or household may be helpful. For example streptococcal infections in the northern United States are most common from January through June. Likewise, a cause of scarlet fever in one child would suggest that a sore throat in another has the same etiology.

2. *Symptoms.*
   - (a) Sore throat—onset sudden, in the tonsillar area, not in the trachea.
   - (b) Headache—common.
   - (c) Fever—variable—but generally from 101° to 104° F.
   - (d) Abdominal pain—common, especially in children. Not too common in adults, but does occur.
   - (e) Nausea and vomiting—common, especially in children.
   - (f) These symptoms are usually *not* present:
     - (1) Simple coryza
     - (2) Cough
     - (3) Hoarseness

3. *Signs.*
   - (a) Red throat—frequently beefy red, but if seen early the redness may be mild.
   - (b) Exudate—usually present.
   - (c) Glands—swollen, tender tonsillar glands at angle of jaw.
   - (d) Rash—scarlatiniform (characteristic of scarlet fever—not common).
   - (e) Discharge—otitis media and sinusitis indicated by (serous or purulent) aural or nasal discharge are frequent complications of streptococcus pharyngitis.

4. *Laboratory.*
   - (a) White blood count—generally over 12,000 and in children frequently over 20,000.
   - (b) Throat culture—positive for hemolytic streptococci.

5. *Therapeutic Response.*

   Almost without exception patients with streptococcal infections are vastly improved within twenty-four hours after penicillin has been started and the temperature normal, or nearly so. This therapeutic response is characteristic and if it does not occur, the chances are much against the disease being due to hemolytic streptococci.

B. *Treatment of Streptococcal Infections.*—In order to be effective, treatment should be started immediately when a streptococcal infection is suspected and continued for sufficient time to eradicate the streptococci from the throat. Penicillin is the drug of choice for treating streptococcal infections. Both the oral and the intramuscular routes of administration have been utilized successfully for penicillin therapy of streptococcal infections. Intramuscular injections have been proved to prevent rheumatic fever. The data on the value of oral penicillin as a preventive is less complete.

Oral administration in contrast to intramuscular administration has these advantages.

A statement and recommendations prepared by the Council On Rheumatic Fever and Congenital Heart Disease of the American Heart Association.

See also: Desk Reference Card for Rheumatic Fever, No. 2, prepared by the Rheumatic Fever Control Committee, Michigan State Medical Society.

(1) It is not as distasteful to many patients.
(2) It requires fewer physicians visits.

It has these disadvantages:

(1) Larger amounts of penicillin must be used.
(2) It is difficult to administer to vomiting or refractory children.
(3) In some adults it gives rise to persistent diarrhea and pruritus ani.
(4) It is difficult to be sure that treatment is continued for sufficient time and given in proper relation to meals to be effective.

1. *Recommended Schedules.*

(a) Intramuscular Penicillin

(1) Children—one intramuscular injection of 300,000 units of procaine penicillin with aluminum monostearate in oil *every third day for three doses.*

(2) Adults—one intramuscular injection of 600,000 units procaine penicillin in aluminum monostearate *every third day for three doses.*
(Note: Less preferable, but usually effective—two doses as above at three day intervals.)

(b) Oral Penicillin

(1) First five days: 200,000 to 300,000 units one half to one hour before meals and at bedtime (total of 800,000 to 1.2 million units per day in four divided doses. Smaller amount children—larger amount adults).

(2) Second five days: 200,000 to 250,000 units one half to one hour before meals (total 600,000 to 750,000 units per day in three divided doses).

Note: To be effective, therapy should be continued for the entire ten days even though the temperature may return to normal and the patient may feel better within one or two days.

(c) Combination of Intramuscular and Oral Penicillin.

Therapy may be begun with one injection of penicillin (300,000 units procaine penicillin with aluminum monostearate in oil) and then, beginning three days after the injection, continued for an additional seven days with oral penicillin according to the schedule b (2) outlined above.

(d) Other Medication.

1. Aureomycin is less effective than penicillin in controlling streptococcal infection but is especially useful in patients who are sensitive to penicillin.
Dosage: Total 10 mg. per pound of body weight in four divided doses daily for two days. Cut dose in half for remaining eight days of therapy.
2. New preparations of penicillin. These may be effective and even preferable to the treatment schedules outlined, but at present they have not had sufficient trial to warrant their recommendation.
3. Other antibiotics: At present there is inadequate data on their value.

(e) Not Recommended for Treatment.

1. Penicillin troches or lozenges.
2. Penicillin followed by sulfonamides.
3. Sulfonamide drugs.

Note: Recurrences of streptococcal infection should be treated as primary attacks.

II. Prevention of Streptococcal Infections

A. *General Rules for Prophylaxis.—*

1. *Who should be treated?*

All individuals under the age of eighteen who have had rheumatic fever or chorea and all those over this age who have had an attack within five years.

2. *When should prophylactic treatment be initiated?*

At the end of the second week of the attack of rheumatic fever or any time thereafter when the patient is first seen.* Prior to the start of prophylaxis, beta hemolytic streptococci should be eradicated by proper treatment of the patient.

(See methods of penicillin therapy recommended above.)

3. *How long should prophylaxis be continued?*

In children, at least to the age of eighteen; in all those above this age, for at least five years from their last attack.

*Note: In patients receiving ACTH or Cortisone, be cautious that other infections are not masked since the prophylactic dose is inadequate to treat such concurrent illnesses as pneumonia or meningitis.

4. *Should prophylaxis be continued during the summer?*
Yes.

B. *Prophylactic Methods.*—

1. *Sulfadiazine.*

This drug has the advantage of being easy to administer, inexpensive and effective (other newer sulfonamides are probably equally effective). Although resistant streptococci have appeared during mass prophylaxis in the armed forces, this is rare in civilian populations.

(a) Dosage—from 0.5 to 1.0 gm. taken each morning throughout the year. The smaller dose is to be used in children under sixty pounds.

(b) Toxic Reactions—these are infrequent and are usually minor. However, in any patient being given prophylaxis with sulfonamides consider all rashes and sore throats as possible toxic reactions to the drug, especially if they occur in the first eight weeks of prophylaxis. The chief toxic reactions are:

(1) Skin eruptions

(a) Morbilliform—much like measles—continue drug with caution.

(b) Urticarial—best discontinue treatment.

(c) Scarlatiniform—often associated with sore throat and fever. Unsafe to continue drug.

(2) Blood reactions.

(a) Leukopenia — Discontinue if white blood count falls below 4,000 and polynuclear neutrophiles below 35 per cent because of possible agranulocytosis which is often associated with sore throat and a rash. Because of these reactions, weekly white blood counts are advisable for the first two months of prophylaxis. (The use of sulfonamides therapeutically for any reason in this period should be preceded by a white blood count). The occurrence of agranulocytosis after eight weeks of continuous prophylaxis with sulfonamides is extremely rare.

2. *Penicillin.*

Although experience with oral penicillin for the prophylaxis of rheumatic fever is more limited than that with the sulfonamides, the antibiotic promises to be a safe and effective prophylactic agent. Oral penicillin has the desirable characteristics of being bactericidal for hemolytic streptococci and of rarely producing serious toxic reactions. It has the disadvantages of being more costly than sulfadiazine and because of the need of giving it on an empty stomach, of being somewhat more difficult to administer.

Oral penicillin represents an alternative drug for rheumatic fever prophylaxis. It is especially important to use this agent for those who do not tolerate sulfadiazine.

(a) Dosage

Although other routines of administration may prove satisfactory, the following schedules are suggested: 200,000 to 250,000 units two times daily is recommended. Since penicillin is best absorbed on an empty stomach, the time of administration should be one-half to one hour before a meal or at bedtime. A single dose of 200,000 to 250,000 units before breakfast is less preferable.

(b) Toxic reactions

(1) Urticaria

(2) Reactions similar to serum sickness—they include fever and joint pains and may be mistaken for rheumatic fever.

(3) Angioneurotic edema

Although many individuals who have had reactions to penicillin can subsequently take the drug without trouble, it is safer not to use penicillin, if the reaction has been severe and particularly if angioneurotic edema has occurred.

References

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(Continued on Page 962)

A Morning in an Arthritis Clinic

By Ezra Lipkin, M.D.
Detroit, Michigan

THE following report, though not contributing any startling discoveries to the field of rheumatology, is but a modest appraisal of a morning's work in an average Arthritis Clinic, where a group of patients were seen, in a routine manner, without previous selection as to type, character, or method of treatment of the condition involved. The one thing that these patients had in common was "rheumatism"—or so it seemed to them or to the admitting officer, because of their complaint of pain in the joints, muscles, nerves, etc. Here, in our Arthritis Clinic, these patients were studied and grouped according to type, a differential diagnosis was made, and the appropriate treatment prescribed. As it happened, nearly every type of arthritis is represented in our report, thus constituting a cross section of the population at large suffering from rheumatic disease.

Over a period of approximately two hours, we saw sixteen patients, all of whom had been studied and treated previously. By far the largest group—seven out of sixteen—or 44 per cent—were of the *osteoarthritic* type, all women, ranging in age from forty-nine to seventy-four years. The joints involved were the terminal phalanges of the hand, with the characteristic Heberden's nodes, the knees and the spine. The complaints were pain and stiffness, with little or no swelling of the affected joints. The patients were usually overweight, and some were hypertensive. The sedimentation rate was normal, and the x-rays showed spur formation, with occasional diminution of the joint spaces, but no ankylosis. The treatment consisted of weight reduction, general and local rest, support to the affected joints, salicylates, and physiotherapy—short wave, infra-red, whirlpool and paraffin baths, traction of the cervical spine, resistance exercises and massage. Occasionally, some of the joints were injected with procaine solution. With the above treatment over an indefinite period of time —continuous or intermittent—considerable relief and freedom from pain was effected.

Dr. Lipkin is Senior Attending Physician in the Arthritis Department of the North End Clinic, Detroit, Michigan.

This osteoarthritic group was subject to exacerbations, depending upon numerous factors, such as increase in weight and activity, weather changes, et cetera. The fact that some of these patients had been attending the Clinic for many years speaks against the application of the term "cure" to the remissions frequently observed. Reassurance plays a distinct role in the management of this condition.

The intra-articular injection of Hydro-Cortone has recently been added to the treatment of osteoarthritic joints. It is particularly applicable to joints from which synovial fluid can be aspirated. Following aspiration, 1 to 2 cc. Hydro-Cortone is injected into the synovial cavity, and repeated at stated intervals. The results have been favorable, and "the duration of benefit from each injection has varied from a few days to several weeks."[5]

The next group in frequency was the *rheumatoid* type of arthritis—two out of sixteen cases—one man, aged sixty-three, and one woman, aged forty. In each case there was periarticular swelling of the proximal joints of the hands and flexion contracture of the fingers. In both cases, the sedimentation rate was elevated, and the x-rays showed diminution of the joint spaces, osteoporosis, and cystic changes in the bones. Both cases were treated with cortisone for periods ranging between two months and two-and-a-half years. Both reported improvement as regards pain, swelling and motion in the affected joints. There was also a decrease in the sedimentation rate, and the dosage of cortisone was gradually reduced from a maximum of 300 mg. per day to a maintenance dose of from 50 to 75 mg. a day, in divided doses.

In an exhaustive study on the treatment of rheumatoid arthritis conducted at the Mayo Clinic by a group of investigators,[13] the subject was summarized as follows: "Three principal programs of treatment are currently available for patients with rheumatoid arthritis: (1) the conservative program of general measures consisting of physical therapy, use of salicylates, extra rest, and other supportive measures[15]; (2) the use of cortisone in addition to the conservative program; and (3) the use of chrysotherapy in addition to conservative measures. Cortisone is indicated and suitable for many but not all rheumatoid patients. Some patients respond adequately to the conservative program and do not require cortisone. Others show definite contraindications to the use of cortisone. Still others require for a satisfactory antirheumatic effect larger doses than they can tolerate

safely (by present methods of administration), either because of the severity of the disease or because of a low tolerance for cortisone.

Generally, the conservative program should be tried first, but if its conscientious application for a reasonable period fails to afford sufficient control of active rheumatoid manifestations, then the use of cortisone is justified, whenever the benefits can be expected to exceed the risks and expense of its administration in the particular patient. Currently, we reserve the use of chrysotherapy for patients who require more than the general program of conservative measures and who are not suitable for treatment with cortisone.

Other measures for the alleviation of the symptoms of rheumatoid arthritis are currently in use. At the 1953 meeting of the American Rheumatism Association in New York, three papers were devoted to the discussion of phenylbutazone (butazolidin). The first[6] stated that "the most striking clinical improvement was observed in acute and chronic gout." Among the other diseases treated were ankylosing spondylitis, psoriasis with arthritis, painful shoulder, rheumatoid arthritis, and osteoarthritis, with the degree of improvement in the order mentioned. Phenylbutazone was used in combination with gold and with cortisone, in some instances with success. Toxic reactions were most frequent in the groups containing the largest number of older patients, but the toxic manifestations were less among the gout patients generally. Toxic reactions included five instances of agranulocytosis with recovery. The most distressing frequent toxic manifestations were gastrointestinal and related to fluid retention. On cessation of medication in chronic rheumatic disorders, where a variable degree of improvement was observed, the symptoms promptly returned in almost all instances.

The second paper[15] reported the use of phenylbutazone in forty patients with rheumatoid spondylitis, with considerable improvement. The treatment continued for a variable period up to twenty-four months. The late toxic manifestations were small. However, the patients maintained their early improvement more satisfactorily than over similar periods of treatment with cortisone or ACTH.

The third paper[2] discussed the toxic reactions of phenylbutazone in seventeen cases, three of whom died. Among the reactions were jaundice, due to toxic hepatitis; heart failure; interstitial myocarditis; optic neuritis; toxic psychosis; peptic ulcer; thrombocytopenic purpura, and granulocytopenia.

Other cases of agranulocytosis from the use of phenylbutazone have been reported.[11] It is, therefore, not a harmless drug, and its use must be accompanied by periodic blood studies. "With the widespread clinical use of phenylbutazone, we have a new agent which offers promising possibilities in investigation and relief of rheumatic disease and gout. Like other potent drugs, phenylbutazone must be handled with caution."[7]

That the last word in the treatment of rheumatoid arthritis has not been spoken is attested to by the fact that investigators are continuing their search for the magic wand that will cure this disease. Discussed at the meeting of the American Rheumatism Association were also: "The Effects of Nitrogen Mustard Therapy in Patients with Rheumatoid Arthritis"[10]; "Implantation of Placental Tissue"[8] and "Post-Partum Plasma in Rheumatoid Arthritis."[9] None of the three last-mentioned methods produced favorable therapeutic results in the majority of the cases studied.

The third group of patients in our Arthritis Clinic—two out of sixteen—presented signs, clinical and roentgenological, of both osteo- and rheumatoid arthritis, the so-called *mixed* type of arthritis, where one type is superimposed upon the other, or develops in the course of time after one has been affected with another type of arthritis—as, for example, osteoarthritis superimposed upon rheumatoid arthritis, bursitis, gout, et cetera. The treatment is that of the predominating disease: between osteo- and rheumatoid arthritis, the latter takes precedence, as it is the more serious of the two; likewise between osteoarthritis and gout, the latter deserves our primary attention.

In the fourth group of our sixteen cases, there was one case of *gouty arthritis,* in a woman of fifty-three, who showed a characteristic increase in blood uric acid and, roentgenologically, punched-out areas in the region of the joints. Under the administration of colchicine—gr. 1/100 every four hours—and a purine-free diet, her blood uric acid diminished from 7.3 to 3.2 mg. per cent, and the condition of her joints improved considerably.

Recently a new drug has been added to the management of gouty arthritis, namely, Benemid (Sharp and Dohme). "It is a relatively non-toxic and effective agent which depresses the concentration of the uric acid in the serum, and increases

the excretion of uric acid in the urine. The quantitative effect is approximately 30 per cent in each instance. The site of action of Benemid is believed to be in or adjacent to the renal tubules and the mode is one of blocking a portion of the uric acid which normally is reabsorbed from glomerular filtrate. Benemid appears to be a relatively safe drug to use and theoretically may alter or even reverse the course of chronic gouty arthritis. For the present, it complements rather than replaces colchicine. Hence, the use of the latter both for treatment of the acute attack, and during the intercritical period, should be unchanged. If prolonged administration of Benemid were to remove effectively the urates that are deposited in involved joints, a clinical cure for gouty arthritis might be a reality."[12]

Of the remaining four cases, one had *calcified peritendinitis,* one *brachial neuritis,* one *fibrositis* with circulatory impairment, and one presented a diagnostic problem, which was not easy to evaluate.

The patient with calcified peritendinitis of the shoulders responded to x-ray therapy; the one with brachial neuritis had satisfactory results from the use of thiamine; the patient with fibrositis, who complained of cramps in the calves of the legs, probably on a circulatory basis, was treated with diathermy and massage; finally, the patient whose case we believe to be of a diagnostic interest presented evidence of both specific and non-specific arthritis.

Case History:—The patient who presented a diagnostic problem was a woman of seventy-five. She complained of painful irregular enlargement of the left wrist, of nine years' duration. There was mobility in the wrist and evidence of inflammation. X-rays taken in 1944, showed evidence of an old ununited fracture of the styloid process of the ulna, and a hairline fracture of the styloid process of the radius. The wrist also showed some decalcification of the distal end of the radius and ulna and of the carpal bones.

In 1945 a small portion was removed from the irregular surface of the wrist, and examined. The pathologic report was as follows: "The specimen consists of a framework of dense fibrous connective tissue which appears to be synovial membrane. Within this connective tissue there are a number of degenerative changes. There is hyaline degeneration and widespread inflammatory cell infiltration. The inflammatory cells consist of lymphocytes, plasma cells, and eosinophiles. In some areas there are larger cells which have somewhat the appearance of epithelioid cells. In some areas these cells are grouped together in small tubercular-like structures. The center portion of these structures exhibit necrosis. In some respects these tubercular-like structures resemble TB, in other respects they do not. No Langhans giant cells are found. The changes which are found are more typical of a *rheumatic nodule.*"

In 1950, the x-rays showed "destructive changes involving the styloid process of the radius, the articulating end of the ulna and many of the carpal bones, and cystic changes at the bases of the second and third metacarpal. In the lateral view fragments of bone extend dorsally to the carpal bones.

Diagnosis: *Destructive type of arthritis with cystic changes.*

The latest x-ray, taken in May 1953, noted "a marked progression of the lytic lesions and partial destruction of the bony structures of the left wrist, with cystic structures occupying the distal end of the radius. There was an irregular sclerosis in the apparent bony septa, and osteoporosis in the distal bones of the hands. *Impression:* The exact nature of the process in the left wrist is not definite, although the appearance is *not* suggestive of rheumatoid arthritis. A much more likely diagnosis, which apparently has been excluded, is gout. Other possibilities are hypoparathyroidism and a low grade malignancy of the wrist with involvement of the bony structures by contiguity."

To be sure, gout had been excluded by normal blood uric acid finding (3.2-4.0 mg. per cent); likewise, parathyroidism was excluded by normal calcium (10.5 mg. in 100 cc. serum) and phosphorus (4.5 mg. in 100 cc. serum) findings. The differential diagnosis resolved itself between the specific arthritides, such as tuberculous or gonorrheal (the Kahn test was negative), non-specific rheumatoid arthritis, gout, parathyroidism and malignancy. Gout was ruled out because of normal uric acid findings, and parathyroidism—even though characterized by cystic changes in the bones—was ruled out because of normal blood calcium and phosphorus values. Tuberculosis and gonorrhea were most unlikely in a woman of seventy-five, because of the late onset of the disease, the absence of ankylosis which is usually characteristic of long-standing specific arthritis. On the other hand, the pathologic report of a rheumatic nodule is of great significance. The destructive process in the joint with the cystic changes could also be the result of prolonged atrophy of disuse, following a traumatic episode, such as was described in the x-ray of 1944—an old ununited fracture of the styloid process of the ulna and a hairline fracture of the styloid process of the radius, with its attendant circulatory disturbance, trophic changes, et cetera. There was no definite evidence of malignancy.

The search for the etiology and specific treatment of rheumatoid arthritis continues on a na-

tional and international level. Rheumatoid arthritis is apparently linked with a group of diseases which have, as their common basis, a generalized connective tissue disorder. It belongs in the category of a group of pathologic conditions called Collagen Diseases, in which are also found rheumatic fever, periarteritis nodosa, scleroderma, lupus erythematosus and dermatomyositis. A very comprehensive address on the subject was recently delivered before the Michigan Rheumatism Association at Ann Arbor, Michigan by Dr. Louis Bauer of Boston. All of these conditions respond to cortisone and ACTH, which, while in no sense curative, may be life-saving by suppressing the acute process until a remission occurs.

On Monday, August 24, 1953, the subject was further discussed in Geneva, Switzerland, at the International Congress of Rheumatic Diseases, under the title "Connective Tissue and Rheumatism." Participants in the discussion were: Drs. J. H. Kellgren, Manchester; G. Feilum, Copenhagen; Charles Ragan, New York; and F. Hartmann, Goettingen. Incidentally, we had the pleasure of listening to Dr. A. Bradford Hill and Dr. Kellgren at the meeting of the American Rheumatism Association, in New York, on May 28, 1953, on the subject, "Comparison of Cortisone and Aspirin as a Suppressive Agent in Early Cases of Rheumatoid Arthritis." A controlled study was made in six different arthritis centers in Great Britain of two comparable groups of patients afflicted with rheumatoid arthritis. One group was treated with cortisone, the other with aspirin. "Both treatment groups reveal, on the average, significant improvement in most of the measured features, followed by a relapse in the week off treatment. The cortisone group reveals a rather greater improvement in the hemoglobin level and blood sedimentation rate, but in other respects the two treatment groups do not, at this first stage, differ materially."[4]

Therapeutically, the steroid hormones continue to evince the greatest amount of interest among rheumatologists. A co-operative study of cortisone therapy in rheumatoid arthritis is being made by a fifteen-man panel selected from among the members of the American Rheumatism Association and a preliminary report was issued of the findings.[1] Twenty-seven ARA physicians representing twenty-five arthritis clinics contributed data on 446 patients, who had been observed from one to three years, found the effect of cortisone was beneficial in improving the functional condition and reducing inflammation in many patients, but showed undesirable effects in about 47 per cent of patients at some time during treatment. The study is continuing and further reports will be made as analysis progresses.

In Geneva, the same subject matter was covered in reports and discussion on "Steroid Hormones in Treatment of Rheumatism," by Drs. Th. Reichstein, Basel; Philip S. Hench, Rochester, Minn.; F. Coste, Paris; and A. Ruiz-Moreno, Buenos Aires. The first two speakers are Nobel Prize winners for their contributions in the field of cortisone.

Great progress has been made in the concept of the rheumatic diseases and their treatment in the past few years. Public interest has been aroused, funds have been created and special research projects instituted. Such universal and enthusiastic approach cannot but bring this most difficult problem nearer to a solution within the lifetime of the innumerable sufferers clamoring for relief from their rheumatic ills.

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Electromyographic Diagnostic Methods in Rheumatoid Arthritis

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THE PROBLEM of muscle atrophy is a perplexing and confusing one within the confines of clinical procedure. This syndrome may have many antecedent, influencing and precipitating, and concomitant causes. In rheumatoid arthritis, muscles have been found to have involuntary activity[1] and atrophy,[2] supposedly due to muscle spasm or degenerative neurological processes associated with increased metabolism due to increased oxygen consumption because of involuntary activity. At best, the actual determination of these pathico-physiologic states cannot be accurately analysed. However, in this recent decade, electromyographic development has presented the clinician with an instrument capable of furnishing accurate scientific and precise information relative to striped muscle and its lower motor neuron innervation.[12] Since atrophy is significant due to its association with muscle weakness, a condition which usually leads to severe joint deformity, a large potential of effort in rehabilitation is either lost or greatly delayed, to the detriment of the patient. It will be our purpose to present the clinical use of the electromyograph as a diagnostic, research and therapeutic tool in rheumatoid arthritis.

Material and Method

An unselected group of patients with rheumatoid arthritis, involving peripheral joints such as shoulders, elbows, knees, ankles, hands and feet, were studied. These patients were on hormonal and steroid therapy as well as physical rehabilitation. A group of patients with neurologic disease such as polyneuritis, poliomyelitis and progressive muscular atrophy were tested for electromyographic complexes. A control series of normal patients were also tested for involuntary muscular activity. Electromyograms were made of the muscles most closely related to the involved joints or of greatest atrophy. In the upper extremity the deltoid, biceps, triceps, forearm flexors and extensors were studied; in the lower extremity the quadriceps, hamstrings, anterior tibial and gastrocnemius-soleus muscles were observed. Similar muscles were examined in the neurological and normal controls.

While usual methods employ surface electrodes or coaxial needle electrodes[3] with multiple channel recordings, we employed a unit similar to the type originally designed by Jasper and Johnson,[5] which utilizes a monopolar needle electrode a cathode ray oscillograph, a sensitive sound high gain amplifier with a regulated tone control, a built-in muscle stimulator using a low frequency current, and a magnetic recording tape mechanism permitting a faithful playback visually and acoustically of the muscle action potentials. The physiologic principle employed rests upon the phenomenon of production of action current or voltage due to depolarization when a muscle fiber contracts.

Observations were made at rest when electrical silence is usually present, and during voluntary activity when simple motor units or polyphasic motor units are present. Quantitative measurement was possible by the presence of an integrating meter device which measures the total electrical energy developed in a given area during muscle contraction, and expresses the relative muscle power in terms of effective microvolts, providing some idea of the strength of a given muscle at any one time.

An effort was made to note any spontaneous activity such as spasm, denervation fibrillation or fasiculation potentials. All patients were carefully positioned to secure maximum relaxation so as to note variations from electrical silence at rest, and active movements to develop specific patterns of activity.

Results

Involuntary activity.—Where spontaneous resting activity was present, it could be readily abolished by proper positioning. Where fascicular twitchings were present (Mueller and Mead) in the quadriceps, these disappeared completely and immediately on good positioning of the knee; another atypical at-rest record was due to a senile tremor (although the complexes were simple motor units of moderately low voltage and partially sustained activity.) Morrison[6] found involuntary muscle activity in 50 per cent of his rheumatoid arthritis patients consisting of contractions of a single motor unit (representing about 150 muscle

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fibers). These appeared and disappeared spontaneously), and usually cleared with good positioning, except for the 50 per cent noted (these results were obtained with surface electrodes). There was no

Voluntary activity.—Several features were noted in this category. (1) Voluntary activity produced weakness and rapid defatigability as indicated by the reduction in effective microvolts and the number of spikes (diphasic simple motor units.)[7] (2) Others indicated a disorganization of the interference pattern of full volitional activity (increasing numbers of motor unit potentials discharging at increasing frequencies.)[10] (3) Isolated potentials suggestive of neurogenic lesions.[12] (4) Low amplitude of fatigue patterns both in rheumatoid arthritis and neurogenic lesions. Painful or weakened states usually show the above patterns similar to that found in periarthritis, and neurologic disease accompanied by weakness.

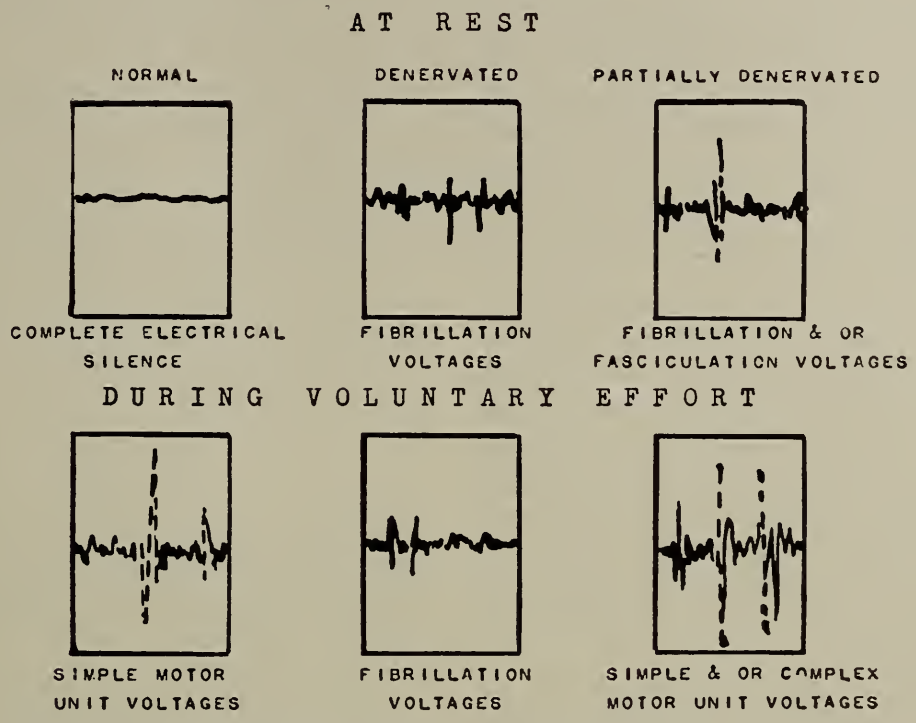


Fig. 1. Characteristic electromyograms of normal, completely denervated and partially denervated muscle.

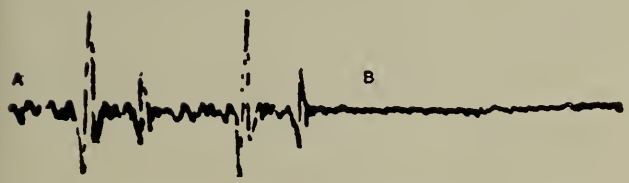


Fig. 2. Results of positioning of rheumatoid arthritis, left knee: (A) Before pillow inserted under knee, (B) After pillow inserted under knee and waiting for five minutes.

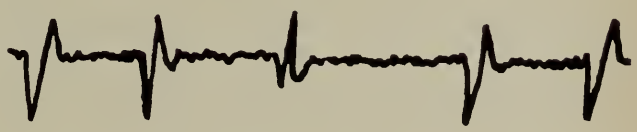


Fig. 3. Patient with rheumatoid arthritis demonstrating lowness and low potential complex of a simple motor type during voluntary activity.

constant relationship between flexor activity and extensor inhibition as has been advanced as a theory for extensory atrophy in rheumatoid arthritis. However, similar findings are present in patients with gonorrheal arthritis and shoulder-hand syndrome, so the phenomenon is not particular to rheumatoid arthritis. Rather, it is a normal pattern of simple motor units, probably originating in the anterior horn or internuncial cell or peripheral nerve. At no time was there any evidence of spontaneous electrical activity of the motor type producing denervation fibrillations or fasiculations.

Mueller and Mead[7] made observations on pa-

tients being treated with ACTH or cortisone before, during, and after treatment. They noted nothing characteristic in the electromyogram.

Discussion

Spasm and spasticity in relation to rheumatoid arthritis as such is really never present. The latter is characterized by synchronization of motor unit leads and spread of tendon reflexes, and was not demonstrated in electrical potentials with rheumatoid arthritis. Spasm (defined as a reversible state of sustained, involuntary contraction, accompanied by muscular shortening, and associated with electrical potentials) did not exist in any of the patients tested. Rather, a voluntary guarding of the painful joint produced a tightness of the muscle that could be relaxed with careful and proper positioning. In all instances, where action potentials are obtained in electromyographic patterns, this so-called spasm disappears with good relaxation and positioning. Wramner[13] found that muscles on stretch produced spontaneous electrical activity in 50 per cent of patients with rheumatoid arthritis, and repositioning and shortening of the muscle cleared all involuntary activity.

Muscle atrophy cannot be explained on the so-called spasm noted with electromygraphic patterns, since extensor atrophy does not parallel flexor activity. Sir James Paget[8] postulated that it results reflexly from painful stimuli. Animal experimentation by several workers has shown that sectioning of the posterior roots prevents or diminishes atrophy by interrupting the reflex arc between the involved joint and the spinal cord. Raymond[9] showed that in animals with bilateral articular lesions and unilateral posterior root section, only the unsectioned side developed atrophy, probably due to a powerful central inhibitory state in the spinal cord. As a typical example, we note the rapid atrophy of the deltoid and biceps muscles in periarthritis of the shoulder. Morrison felt that single motor units discharges were well below the range of work necessary to produce atrophy. Clinically, in rheumatoid arthritis, flexion deformities are the rule, but atrophy is usually found in the extensors (as the quadriceps in knee joint pathology.) Electromyographic studies on the flexors do not show any involuntary activity. Most probably, the effect of gravity, long periods of fixation and positioning for pain relief cause the flexion deformities. Where denervation fibrillation is present in rheumatoid arthritis, the histologic findings of Morrison (that twenty-six of thirty-one cases show lesions in the peripheral nerves, and eight of fourteen cases in the muscles) may offer an explanation. However, in no instance does denervation fibrillation occur in the resting state and involuntary activity in our experience. Solandt[11] felt that atrophy of denervated muscle is not due to overwork or constant fibrillation.

Muscle reeducation and strengthening is possible when alienation and disuse are present by means of the electromyograph as a director. In a patient, when inserting the needle in the weakened or stretched muscle, then stimulating it electrically, a real muscle contraction results and proprioception is aroused. When the patient can hear and see the function in the amplifier and oscillograph, he then can frequently begin a more active program of strengthening and range of motion function.

Conclusion

1. Muscle spasm is probably not present in rheumatoid arthritis indicating no real spontaneous electrical activity during the resting state. Such electrical complexes as occur are readily removed by proper positioning.

2. Muscle atrophy and weakness is due to a reflex central spinal cord inhibition resulting from painful local stimuli. Histologically, there is direct involvement of the peripheral nerves by the disease process, but no evidence of any denervation fibrillation.

3. Early rehabilitation is possible by the visual, auditory and stimulative components of the electromyogram.

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Gouty Arthritis

Diagnosis and Treatment

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DURING THE past ten years there have appeared several comprehensive articles dealing with gout and gouty arthritis. A brief summary of the subject seems justified in that medical men, in general, do not have a sufficiently high index of suspicion for this condition. Many cases of gout are still going undiagnosed for as long as ten to fifteen years. Some of the more frequent diagnostic errors are cellulitis, rheumatic fever, and acute arthritis due to infection, as with the gonococcus. The idea is rampant that gout occurs only in the wealthy, the overweight, and the overindulgent in food and alcohol. When looked for, it is frequently discovered in those in humble circumstances. Further, the fact that twenty men are afflicted to one woman, should not remove this disease from the differential diagnosis in women with joint disease, especially in those in the postmenopausal period. This brief summary of diagnostic reminders and practical therapeutic measures contains nothing original but is presented in the hope that it may aid in the recognition and treatment of some of the many cases who have not yet been diagnosed.

Diagnosis

The typical pattern of an attack of acute gouty arthritis is that of sudden acute great toe joint pain, often starting at night, with rapidly increasing discomfort, swelling, redness, local heat and exquisite tenderness. The attack if untreated will usually subside in four to ten days, leaving no residuals except perhaps some desquamation of the overlying skin. However, this typical picture ushers in the disease in only about one-half of the cases, the remaining ones showing a similar type of involvement in the region of the instep or ankle or heel, or in the knee, hand, wrist, or elbow. Occasionally multiple joints are involved, either simultaneously or successively. Olecranon bursitis is common. In untreated cases, after a period of freedom, subsequent attacks develop in the same or other joints at variable intervals, and the history of a series of such acute attacks with complete clearing between bouts is almost pathognomonic of gout.

The acute attacks may be precipitated by minor trauma; by overindulgence in high purine foods or fats, or in alcoholic beverages; by surgical procedures or other situations involving stress; by infections; or by certain medications, notably mercurial diuretics, liver extract, and vitamin B compounds. Acute joint involvement in a patient with a history of renal colic or of the passage of urate stones should always be considered as due to gout until disproved.

Whenever an acute monoarticular arthritis occurs, particularly in a man over thirty years of age, gouty arthritis should be suspected. A trial of twenty-four hours of colchicine therapy, as detailed below, should be given as a therapeutic test, without waiting for the results of serum uric acid determination. Prompt clearing of the acute attack is diagnostic for gout, since colchicine benefits no other form of arthritis.

It is not until after several years of such repeated acute attacks that the changes of chronic gouty arthritis appear, resulting from the formation of tophi in and about joints, and secondary degenerative joint disease or osteoarthritis.

The photograph in Figure 1 represents the left hand of a patient who is experiencing an attack of acute gouty arthritis at the proximal interphalangeal joint of the middle finger and in the wrist. Figure 2 shows the right hand of the same patient, with deformities resulting from chronic gouty arthritis at the terminal interphalangeal joint of the index finger and at the proximal interphalangeal joint of the little finger. Figure 3 is the roentgenogram of this same right hand. Bone tophi, represented by punched out areas and indicated by arrows, are seen near the affected joints and elsewhere. The tophi in the soft tissues overlying the joints which are noted in the photograph do not appear in roentgenograms, since urates are radiolucent.

Deposits of urates (tophi) in articular, periarticular bursae, and subcutaneous tissues eventually develop in from 25 to 50 per cent of patients with gout. They are seen most frequently upon the helix (Fig. 4) or antehelix of the ear, but occasionally occur in the olecranon and prepatellar bursae and in tendons of the fingers and wrists.

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Fig. 1. W.P., left hand. Acute gouty arthritis involving proximal interphalangeal joint of middle finger, and wrist.



Fig. 2. W.P., right hand. Chronic tophaceous gout involving terminal interphalangeal joint of index finger and proximal interphalangeal joint of little finger.



Fig. 3. W.P., right hand. Roentgenogram, showing bone tophi as indicated by arrows.

Tophi have been found in all parts of the body, even in the walls of blood vessels.

When tophi are present in easily accessible places, a positive diagnosis of gout may be made by needling, and demonstrating the characteristic needle-shaped crystals of sodium monourate. Suspected ear tophi may prove to be nothing more than nodular or beaded cartilage, but definitive examination should always be made. Tophi may ulcerate and discharge large quantities of white chalky material which gives a positive murexide test. Many of these chronically involved areas show little tendency to heal.

Patients with gout usually have an elevation of the serum uric acid, but this is not always true at the time of the attack. Not uncommonly the uric acid level in blood serum will be within normal limits during the acute attack, but if repeated determinations are done, elevated levels will be found at some time in almost all gouty individuals. For this reason a diagnosis of gout cannot be founded or denied on the basis of blood uric acid determinations alone. It must be remembered that in addition to gout, elevation of blood uric acid may occur in acute and chronic glomerulonephritis, after liver therapy, and in leukemia, polycythemia, and occasionally in acute febrile illnesses.

Gout is frequently confused with acute rheumatoid arthritis, and at times with acute rheumatic fever. Patients with acute rheumatoid arthritis usually have multiple symmetrical joint involvement; acute rheumatic fever patients usually have a history of preceding acute upper respiratory infection with polyarticular migratory joint involvement. Acute Neisserian arthritis was frequently confused with gouty arthritis, but with the current antibiotic therapy of gonorrhea secondary arthritic involvement is now a rarity. The presence of a purulent effusion in the joint with past history of urethritis usually makes the diagnosis clear. It is not uncommon to find patients with confusing pictures resulting from the simultaneous presence of changes due to gout and degenerative joint disease, gout and rheumatoid arthritis, or even gout, old rheumatoid arthritis, and degenerative joint disease or osteoarthritis.

Treatment

The Acute Attack.—The goal in treating an attack of acute gouty arthritis is to obtain the most prompt symptomatic relief possible. This can usually be obtained by the time-honored practice of putting the patient to bed, with the weight of the bed clothes supported by a cradle or box, and with either cold or warm moist compresses to the affected joint. The diet should be purine-free, consisting of milk, fruit juices, eggs, and cereal products, and liquids should be given freely. Acetylsalicylic acid should be given, 40 to 80 gr. in the first twenty-four hours. Colchicine, 1/100 gr., is given every two hours until pain is relieved, or until gastrointestinal symptoms develop (nausea, abdominal cramps, or diarrhea). These latter symptoms are readily controlled with paregoric in teaspoonful doses, repeated if needed.

Further Management.—The objective in the further management of the gouty patient is to prevent, so far as possible, the occurrence of additional acute attacks and the development of chronic tophaceous gout if not already present. In spite of therapy, the basic metabolic defect remains unchanged. However, with proper treatment the frequency of acute attacks may be diminished. Basically, therefore, the pattern of the patient's symptoms must be considered in outlining further care. The following points deserve consideration:

1. Was this the patient's first attack?
2. Was the attack precipitated by an operation, or by some medication?
3. Has the patient had multiple acute attacks?
4. Has the patient developed chronic tophaceous gout?

In the patient who has experienced his first attack of acute gouty arthritis, it can be assumed that another attack will probably occur after a variable interval if the patient remains untreated. After the subsidence of the acute symptoms, such a patient is best advised to consume a low purine diet and to take maintenance drug therapy consisting of colchicine, 1/100 gr. three times daily every other day, plus enteric coated acetylsalicylic acid, 30 to 40 gr. daily. Serum uric acid determinations at intervals of one to four weeks should be made as long as the level is elevated.

After a trial period of four to six months it may be advisable to discontinue the colchicine, but maintain the dietary control and salicylates. Dietary restriction alone may suffice to prevent recurrence of acute attacks if the uric acid level in the blood remains within normal limits.

In patients in whom the acute attack has been precipitated either by surgical operation or unusual stress, or by the administration of one of the medications mentioned earlier, the treatment of the acute attack is essentially as indicated above. Great care should be taken in the case of postoperative patients not to push the colchicine to the point of causing vomiting or diarrhea. It has been our experience that patients whose only acute attacks have followed surgical procedures are usually easily controlled, and may never have further attacks unless again exposed to similar stressful situations. Any patient who has been known to have had an attack of acute gouty arthritis and who needs elective surgery should have a preoperative serum uric acid determination. Whether or not the level is elevated, he should be given several days of preoperative therapy with salicylates and with colchicine, 1/100 gr. three times a day. He should be closely watched for signs of acute arthritis after surgery up to ten days. He should be maintained on a low purine diet until this period has elapsed. If there is any suggestion of an acute attack in the postoperative period, colchicine is administered in dosage of 1/100 gr. every two hours until the attack is controlled.

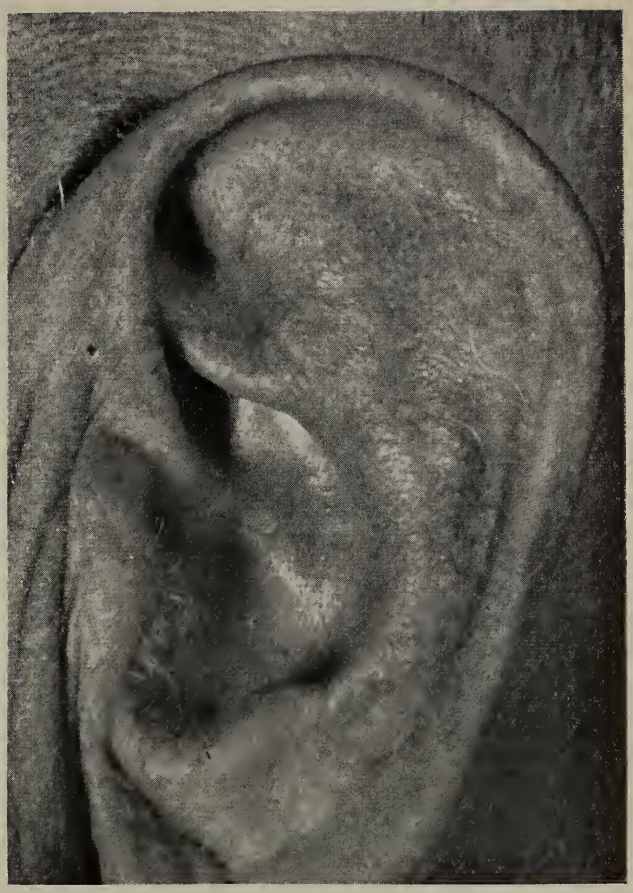


Fig. 4. R.R., left ear. Gouty tophi in characteristic location on helix.

The patient who has experienced multiple attacks of acute gouty arthritis needs careful consideration. If he has never before had comprehensive therapy, the chances are excellent that he will be controlled by a low purine diet, plus the regular use of salicylates and colchicine 1/100 gr. three times a day, every other day. Such a patient should always carry colchicine tablets with him, and at the suspicion of the onset of an acute attack should take a tablet every two hours until the symptoms clear. Periodic determinations of serum

uric acid are helpful. If this level remains elevated, or if the patient continues to have acute attacks on the above program, Probenecid (Benemid) should be substituted for salicylates, in dosage of one to two grams daily. Inasmuch as there is a mobilization of the urates from the miscible pool under Probenecid therapy, acute attacks of gouty arthritis may occur unless colchicine is administered concurrently until the serum uric acid content falls to normal. It is important that salicylates be discontinued during administration of Probenecid inasmuch as they tend to block the uricosuric action of this drug. Liberal fluid intake should be maintained during Probenecid therapy. Some observers insist that the urine be kept alkalinized to prevent the precipitation of urate urinary calculi.

The patient who has developed chronic tophaceous gout needs very careful evaluation of renal function. Not only should purine-containing foods be kept at a minimum in the diet, but also the total protein of the diet should be restricted to maintenance levels. Probenecid therapy should be instituted, since tophaceous deposits have been found to lessen in some instances with this treatment. As mentioned above, colchicine should be given also until the serum uric acid level is within the normal range.

Other Measures.—The principles of therapy briefly outlined above have been found most practical. The great majority of cases may be controlled by these measures. Occasionally, acute attacks are refractory to treatment, and one or more of the following suggestions may prove necessary:

1. Corticotropin intravenously, 20 units in glucose-saline solution given by drip over a three- or four-hour period.

2. Corticotropin intramuscularly, 100 mg. daily, using either the aqueous preparation in divided doses at six-hour intervals or the gel preparation every twelve to twenty-four hours. Colchicine must be administered concurrently to prevent recurrence of the acute attack shortly after relief is obtained from corticotropin.

3. Hydrocortisone, 25 to 50 mg., by intra-articular injection into the involved joint.

4. Cortisone may be used orally, but seems less effective than corticotropin in gout.

5. Phenylbutazone should not be used routinely until its toxic effects have been more fully evaluated. It is an effective agent in relief of pain and has a valuable uricosuric action. A dose of 200 mg. four times a day until subsidence of the acute attack will seldom cause untoward effects, but prolonged use is not desirable unless other agents fail.

Summary

Gout is still a relatively common though frequently overlooked cause of acute and chronic joint disease. Although the fundamental metabolic disturbance is poorly understood and so far cannot be corrected, there are effective methods of controlling acute symptoms. By simple but prolonged and faithfully followed treatment, the incidence of acute attacks can be diminished and the development of chronic tophaceous gout may be delayed or prevented in many instances.

PREVENTION OF RHEUMATIC FEVER

(Continued from Page 951)

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Osteoarthritis Treated with ACTH

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SINCE THE appearance of ACTH and cortisone on the therapeutic horizon, there has been little, if any, interest in the treatment of osteoarthritis with these substances. Perhaps the reason for this is that osteoarthritis has always been considered a wear and tear phenomenon common to many older persons, and not in the therapeutic class with rheumatoid arthritis, rheumatic fever, disseminated lupus erythematosus, polyarteritis nodosa and other entities which have received more therapeutic notoriety. The literature contains a few isolated case reports of treatment of osteoarthritis with steroids and corticotropins. One of us reported two cases of osteoarthritis which responded dramatically to treatment with ACTH.[5] Bauer, and his co-workers,[1] have cited three cases of osteoarthritis treated with cortisone, Boland[2] reported one case markedly improved with cortisone, and Hench, et al.[7] reported one patient with osteoarthritis and leukemia, who responded very dramatically. There are on record a few cases of degenerative joint disease of the hip (malum coxae senilis) treated with cortisone. Dowdell[6] reported improvement in the treatment of malum coxae senilis in eight out of ten patients. Boots[3] and his co-workers treated eleven patients with degenerative joint disease of the hip, with marked improvement in ten of these eleven cases. Brown[4] had a somewhat different experience in a series of eight cases of degenerative joint disease of the hip, with improvement of only two cases with cortisone therapy.

Hollander[8] and his group injected forty-two osteoarthritic joints with hydrocortisone; the group containing thirty-seven knee joints, two hip joints, two terminal phalanges, and one metatarsophalangeal joint. There was marked improvement in all of these cases. Hollander reported improvement with complete, or nearly complete, disappearance of pain, and return of normal work tolerance within twenty-four hours. He was not able however, to get the same results with the local injection of cortisone.

With these data in mind, it would seem logical that if osteoarthritis responds to treatment orally, and by injection with cortisone, and also responds to the local injection of hydrocortisone, that corticotropin, ACTH, should also produce beneficial results. This is assuming, of course, that the patient has intact adrenal glands, which are able to respond to the stimulation of the adrenocorticotropic hormone, and allow for the elaboration of the aforementioned steroids.

We have collected a series of seventeen cases of more or less far advanced osteoarthritis, with marked changes in the joints, both by x-ray and by physical examination. The patients also were individuals who complained mainly of arthritic symptoms, such as; joint pain, stiffness, decreased range of motion, joint swelling, and paresthesias. A brief summary of the cases follows. All cases were given aqueous ACTH intramuscularly at six-hour intervals.

Case 1.—A. S., a fifty-four-year old white man, complained of pain in the ankle joints, knee joints, wrists and interphalangeal joints. These symptoms had persisted over a period of many years. Physical examination revealed typical degenerative joint disease of the aforementioned joints, with several Heberden's nodes on the fingers. The ankle joints were swollen and there was marked limitation of motion in all directions. X-rays of the knee joints revealed typical changes of osteoarthritis. The patient received twelve injections of 40 mg. of ACTH and twenty injections of 20 mg. of ACTH. Within forty-eight hours, the patient noted very marked improvement and upon discharge from the hospital was able to walk easily, without pain, and was able to do deep knee bends without difficulty. The only undesirable side effect noted was insomnia.

Case 2.—D. R., was a forty-four-year-old-white man whose chief complaint was pain in the cervical area of one-year duration. Physical examination revealed pain and limitation of motion on movement of the head laterally, both to the right and left. There was fair range of motion as to flexion and extension. There was palpable crepitus with lateral motion over the cervical vertebrae. X-ray was reported as revealing evidence of narrowing of the intervertebral spaces between the sixth and seventh cervical vertebrae, with moderately advanced hypertrophic changes. The patient received twenty-four injections of 25 mg. of ACTH, 5 injections of 20 mg. of ACTH, and twelve injections of 15 mg. of ACTH.. At the end of twenty days of treatment the patient was very markedly improved, and was free of pain in the cervical area.

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Case 3.—F. R., a fifty-six-year-old white man, complained of recurrent episodes of painful swelling of both ankles and feet for a period of four weeks. Physical examination revealed both ankles to be somewhat swollen, but more markedly so in the right ankle which was red and somewhat tender over the lateral malleolus. X-ray revealed markedly hypertrophic changes involving the right foot and ankle, with less marked changes in the left foot and ankle. The patient was given a total of thirty-nine injections of 25 mg. of ACTH and fourteen injections of 10 mg. of ACTH. There was not a rapidly dramatic clinical response, but a slow gradual improvement over a period of sixteen days. At the end of that time the patient was free of pain and swelling in both ankle joints.

Case 4.—G. V., a fifty-nine-year-old white man, was admitted to the hospital complaining of pain in the lower lumbar area and both hip joints. Physical examination revealed extreme pain on motion of the trunk forward or flexion of the back, and extension or lateral flexion of the lumbar area. Patrick's sign was positive bilaterally. There was also pain on flexion of the thigh on the abdomen bilaterally. X-rays of the hip joints revealed a malum coxae senilis, and x-rays of the lumbosacral area revealed hypertrophic changes in the sacroiliac synchondrosis. The patient was given seventeen injections of 25 mg. of ACTH, three injections of 12.5 mg. of ACTH, four injections of 20 mg. of ACTH, five injections of 15 mg. of ACTH, and four injections of 10 mg. of ACTH. Over a period of ten days, the patient experienced very marked clinical improvement with loss of pain in the lumbar area and a marked decrease of pain in the hip joints. There was an increase in motion as far as flexion of the back was concerned, and also an increase in motion of the hip joints.

Case 5.—L. A., was a forty-eight-year-old white man who complained mainly of pain in the cervical area over a period of many years, but very acute pain ten days prior to admission. Physical examination revealed pain and limitation of motion upon lateral motion of the head and neck, and pain upon flexion of the neck upon the chest and also extension of the neck. No crepitus could be palpated or auscultated. X-ray examination revealed moderately severe hypertrophic changes, involving the lower cervical fifth, sixth, and seventh vertebrae. The patient received forty-five injections of 25 mg. of ACTH, three injections of 20 mg. of ACTH, and eight injections of 15 mg. of ACTH. The patient experienced moderate clinical improvement over a period of seventeen days.

Case 6.—M. M., a forty-eight-year-old white woman, had had symptoms of osteoarthritis over a period of several years, but was admitted to the hospital with more acute stiffness and pain in the left knee joint. Physical examination revealed a swollen and tender left knee joint with moderate stiffness and limitation of motion as to flexion and extension. X-ray examination revealed very extensive hypertrophic changes involving the left knee joint. The patient was given thirty-two injections of 25 mg. of ACTH, four injections of 20 mg. of ACTH, eleven injections of 15 mg. of ACTH, and eight injections of 10 mg. of ACTH. Over a period of fifteen days the patient noted very marked and progressive clinical improvement, with loss of pain and increased range of motion in the affected joint.

Case 7.—D. K., a sixty-year-old white woman, was admitted to the hospital with the complaint of a painful left hip, left knee, and painful ankle joints, of three years' duration. Physical examination revealed a markedly swollen left knee and both ankle joints showed marked swelling also. There was pain and limitation of motion of these joints. X-ray revealed moderately advanced hypertrophic changes in the left hip, both knee joints, and both ankle joints. The patient received twelve injections of 20 mg. of ACTH, seventeen injections of 15 mg. of ACTH, thirteen injections of 10 mg. of ACTH, and four injections of 5 mg. of ACTH. Very slight improvement was noted in this patient's condition.

Case 8.—W. J., was a fifty-three-year-old white man whose chief complaint was pain in the lower lumbar area, the left hip, both ankles, and both knee joints, as well as the right elbow joint. Physical examination revealed tenderness and muscle spasm over the lumbosacral spine, with splinting of the left lower extremity and pain on motion of the left knee joint and left ankle joint. There was moderate swelling of the left knee and left ankle joints. X-rays reported moderate hypertrophic changes of the left ankle joint and fairly extensive hypertrophic changes involving the lumbar spine. There was questionable spondylolisthesis of the first sacral segment on the fifth lumbar. There was a congenital anomaly of the first sacral segment with lumbarization bilaterally. The patient was given twenty injections of 25 mg. of ACTH, with very marked clinical improvement over a nine-day period. There was relief of pain, relief of muscle spasm, and an increase in the range of motion of the affected joints.

Case. 9.—H. R., a sixty-three-year-old white woman, whose chief complaint was pain in the shoulders, interphalangeal joints of both hands and both knee joints, with swelling and tenderness. She had had arthritic symptoms on and off for the past fifteen years. Both knee joints were somewhat tender and swollen with a markedly decreased range of motion in all directions. X-ray revealed far advanced hypertrophic changes in both knee joints. The patient was given a total of sixty-six injections of 20 mg. of ACTH, seventeen injections of 15 mg. of ACTH, and fifteen injections of 12.5 mg. of ACTH. Over a period of twenty-eight days the patient experienced very marked clinical improvement with gradual loss of pain, loss of swelling and tenderness, and increased range of motion of the affected joints.

Case 10.—J. B., a forty-one-year-old white man, was admitted to the hospital with a chief complaint of pain in the lumbosacral area. Physical examination revealed limitation of motion of the lumbosacral spine with de-

creased flexion of the spine and limitation of motion both to the right and left. X-ray of the lumbosacral spine revealed irregularity and sclerosis of the right sacroiliac joint, associated with a sacralization on the right. The appearance was suggestive of chronic osteoarthritis. The patient was given ten injections of 20 mg. of ACTH, over a five-day period, and experienced very marked clinical improvement during that time.

Case 11.—E. C., a fifty-nine-year-old white woman, was admitted to the hospital with a complaint of severe pain in the left hip joint, of seven years' duration. Physical examination revealed pain on motion of the left hip joint in all directions, particularly with flexion of the thigh upon the abdomen. A few Heberden's nodes were noted on the fingers of both hands. X-ray revealed extensive malum coxae senilis of the left hip, with ankylosis of the left hip joint. There was a congenital anomaly of the first sacral segment. There were moderate hypertrophic changes in the lumbar spine. The patient was given twenty-one injections of 25 mg. of ACTH, twenty-two injections of 20 mg. of ACTH, and six injections of 10 mg. of ACTH. Over a thirty-day period the patient noted gradual, but very progressive, clinical improvement with loss of pain and marked improvement in ambulation.

Case 12.—J. R., a forty-eight-year-old white woman, was admitted to the hospital with the chief complaint of pain in the cervical area aggravated by motion laterally, either to the right or left. Physical examination corroborated the patient's complaints. Crepitus was palpable upon lateral motion of the neck. X-ray examination revealed moderately advanced hypertrophic changes. involving the cervical and lumbar spine. The patient was given a series of forty-seven injections of 12.5 mg. of ACTH, and noted moderate clinical improvement over a twenty-eight-day period.

Case 13.—R. B., was a sixty-five-year-old white woman whose chief complaint was rheumatism in both knee and ankle joints. Physical examination revealed moderate swelling of both knee joints and both ankle joints, with limitation of motion and tenderness upon palpation of the affected joints. Heberden's nodes were noted on both hands. X-ray revealed far advanced hypertrophic changes in both knee and ankle joints. The patient was given nine injections of 12.5 mg. of ACTH, with moderate clinical improvement. There was loss of pain, but stiffness and limitation of motion persisted.

Case 14.—G. Y., was a sixty-one-year-old white woman whose chief complaint was pain in the back and pain in the cervical area of several months' duration. There was tenderness to pressure over D-6 with reflex mucle spasm associated. There was also limitation of lateral motion both to right and left in the cervical spine. X-ray revealed rather extensive hypertrophic changes of the cervical and dorsel spine. There is a questionable spondylolisthesis of the fifth cervical vertebra. The patient was given five injections of 12.5 mg. of ACTH, and during that period experienced slight relief of pain. However, due to acute coronary insufficiency, the corticotropin was discontinued.

Case 15.—E. R., was a fifty-year-old white man whose chief complaint was pain in the cervical area, particularly on the right side, with radiation into the right deltoid region, of one and one-half years' duration. There was rather marked muscle spasm in the right cervical group and moderate tenderness to palpation. There was no nodularity noted in the muscles involved. X-ray examination revealed far advanced hypertrophic changes of the cervical spine. The patient was given six injections of 50 mg. of ACTH, and two injections of 60 mg. of ACTH. The patient noted very marked clinical improvement even after the first injection.

Case 16.—B. G., was a fifty-six-year-old white woman whose chief complaint was pain in the lumbosacral area and the joints of both hands. The patient had typical changes of hypertrophic arthritis in the proximal interphalangeal joints of both hands. There was a moderate scoliosis at the level of the fourth and fifth lumbar and first sacral vertebrae. X-ray revealed moderate hypertrophic changes involving the lumbar spine and extensive mixed arthritis involving interphalangeal joints, particularly of the right hand. The patient was given forty-nine injections of 15 mg. of ACTH, and noted a very marked and progressive clinical improvement, with loss of pain and increased range of motion of the affected joints.

Case 17.—M. U., was a fifty-two-year-old white man whose chief complaint was pain in the lower lumbar area, pain in both knee joints, with stiffness and limitation of motion and pain in the interphalangeal joints. There was marked limitation of flexion of the lumbosacral area, with marked spasm of the lumbar muscle groups, and there was moderate swelling seen in the wrists, knees, and proximal phalangeal joints on both hands. X-ray revealed moderate hypertrophic changes involving the interphalangeal joints with some osteoporosis. The knee joints revealed moderate hypertrophic changes involving the posterior margins of the patellae and the upper ends of both tibiae. The patient was given 25 mg. of ACTH for seven injections, and then, because of lack of the drug, was switched to 100 mg. of cortisone for twelve injections, 75 mg. of cortisone for thirteen injections and 50 mg. of cortisone for nine injections. The patient experienced very marked improvement with complete loss of pain in all affected joints and in increased range of motion as far as flexion of the lumbar spine was concerned, and flexion of the knee and interphalangeal joints.

Discussion

As can be seen from the protocol, out of seventeen patients with osteoarthritis treated with ACTH, fifteen experienced definite relief of symptoms, while one had slight, if any, help and the other could not be evaluated because treatment was discontinued following acute coronary insufficiency.

TABLE I. RISE AND FALL IN CIRCULATING EOSINOPHILE COUNT DURING AND AFTER TREATMENT.

Patient	During Therapy	Cessation Of Therapy
H. R.	Fell	Rose
F. R.	Fell	Rose
J. B.	Rose	Rose
M. U.	Fell	Rose
G. V.	Fell	Rose
W. J.	Fell	Rose
M. M.	Fell	Rose
D. K.	Fell	Rose
L. A.	Rose	Rose
A. S.	Fell	Rose
B. G.	Fell	Rose
G. Y.	No correlation	No correlation
E. R.	Fell	Rose
R. B.	No correlation	No correlation
J. R.	Rose	Level
E. C.	Fell	Rose

It is of some interest also that the majority of patients in this group experienced a typical fall in eosinophile count (see Table I) during treatment. In that respect, at least, osteoarthritis behaves like any other reaction of stress. In no sense can this form of arthritis be thought of as an inert stone-like wear and tear process, insensitive to treatment, unmoved by active therapeutic measures. It is a common failing of the medical profession to consider any process which has been dignified by calcification as not only harmless and more or less asymptomatic, but also untouchable by active treatment, such as with corticotropin or with cortisone or hydrocortisone. Hollander has shown repeatedly that locally injected hydrocortisone will relieve the pain and stiffness of osteoarthritic joints. There is no reason, then, to deny that ACTH can produce similar results in patients with adrenals capable of stimulation.

Summary

A series of seventeen cases of chronic osteoarthritis have been treated with adrenocorticotropic hormone. Fifteen of these experienced marked relief from pain, swelling, stiffness, and limitation of motion in the affected joints. It is felt that osteoarthritis should no longer be considered an inert, so-called wear and tear process, but a progressive stress disease of joints with periods of activity which respond readily to treatment with corticotropin. The eosinophile response in this disease is similar to that seen in other stress situations.

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ARTHRITIS FOUNDATION BEGINS FOURTH YEAR

(Continued from Page 945)

the same level during the present fiscal year. I am not going into detail about these projects because their direction is the function of our medical director who discusses them in this issue.

Our personnel have attended several national meetings of our National Foundation on both the medical and operational aspects of Chapter operation; our medical director has shown our film, in conjunction with talks, before nurses and lay organizations, and this year we plan on showing our film before luncheon clubs. This film has also been used extensively by the University of Michigan School of Public Health, has been loaned out to other organizations, including the United Health and Welfare Fund of Michigan, Inc.

Again our sincere thanks go to the United Health and Welfare Fund of Michigan, Inc., for all their courtesies in dealing with us, to say nothing of the yearly funds to support our work, and to the United Foundation of Metropolitan Detroit which raises money for United Health in Metropolitan Detroit. We also wish to thank the Michigan State Medical Society for again devoting practically this entire issue of their influential JOURNAL to articles on arthritis research and findings—so valuable to us in our educational work among the medical profession.

Osteoarthritis of the Knee

The Importance of the Quadriceps Femoris in the Mechanism and Management

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OSTEOARTHRITIS of the knees is frequently compared to rheumatoid arthritis by saying that it is not crippling while rheumatoid arthritis may be. This is done for the patient's reassurance. It may be necessary to allay these fears lest the emotional disturbance which may be engendered becomes the chief complaint.

"Crippling" may not be the word to describe it but many patients may be disabled by this degenerative process in the large weight-bearing joints between the femur and tibia.

The pathologic changes seen in osteoarthritis are generally attributed to degeneration, wear, and failure of the blood supply to the cartilage. These factors being equal in many people, the exact mechanism by which the clinical entity may be initiated may vary from one case to the next.

One of the commonest initiating factors is trauma. A misstep or a twisted knee may initiate pain. Excessive use, a gain in weight, an infection, or an illness which requires bed rest may initiate the clinical problem. Once the pain has begun there soon follows favoring and disuse and the resulting muscle weakness. We are of the opinion from our observations, that once the pain begins there follows a muscular weakness due to favoring or disuse which in turn allows the knee to become unstable in extension. When this condition exists each step on the unstable knee implies minute movements of the cartilages, one on the other, which increases the damage, accelerating the process and establishing a vicious cycle.

Observations on a number of these patients show that weakness and pain are almost synonymous in this problem of osteoarthritis of the knees. In cases where only one knee is involved it is invariably the weak one and during treatment, when its strength is brought nearer to normal, the pain may leave almost as though there were a reciprocal function, one of the other.

All diseases of the knee, whether in young or old, have one thing in common and that is weakness of the quadriceps femoris. This muscle has long been known to be remarkably sensitive to disuse, and atrophy and weakness will develop here more rapidly than in other muscles in the same circumstances. This problem must be recognized in cases of osteoarthritis as well as in postoperative patellectomies, tibial plateau fractures, or any other disorder of the knee. In the following paragraphs we will describe a group of normal knees, report a series of painful osteoarthritic knees, and discuss a program of treatment which in our experience has been reasonably successful and, to us, seems somewhat more logical than just rest, heat and aspirin.

The Quadriceps Femoris in the Normal Knee

The quadriceps, as the name implies, is actually four individual muscles acting as one unit. These four are, the rectus femoris, the vastus lateralis, the vastus intermedius, and the vastus medialis. It is not the purpose of this paper to dwell on the origins and insertions and individual actions of this muscle group. In the knee joint, the muscles, of which the quadriceps is the major one, act as ligaments. There is no complete independent capsular ligament uniting the bone, and instead the joint is surrounded by a thick ligamentous formation composed chiefly of muscle tendons or expansions from them. Indeed, it has been stated that the quadriceps is the watchdog of the knee; it is the captain, quarterback and backfield of the knee's defense. The strongest ligament of the knee joint is not a ligament at all, but it is the quadriceps muscle.

The three main functions of the quadriceps can be briefly summarized as follows:

1. Extending the knee.
2. Keeping the patella "in the groove."
3. Stabilizing the knee.

In order to obtain an idea of the normal strength of the quadriceps femoris muscle in subjects not affected with osteoarthritis, a group of twenty nonaffected men were tested by the method of DeLorme for maximum quadriceps power. These data are recorded in Table I.

The method of applying resistance was chosen by the authors because of its simplicity. It is adaptable to use in any physician's office. A spreader bar of the type used in orthopedic trac-

TABLE I.
QUADRICEPS STRENGTH IN NORMAL SUBJECTS

	Subject	Resistance	Age	Height	Weight
1.	B.A.	17	23	67″	138
2.	S.A.	16	27	65″	125
3.	L.A.	16	23	68″	146
4.	A.C.	14	25	69″	159
5.	H.B.	24	70	73″	202
6.	R.F	22	30	71″	165
7.	P.G.	12	27	67″	144
8.	F.H.	32	38	75″	210
9.	A.J.	17	38	68″	150
10.	G.K.	22	28	72″	177
11.	M.M.	14	73	68″	160
12.	E.B.	30	30	69″	158
13.	J.C.	35	32	71″	230
14.	W.F.	40	29	72″	155
15.	J.I.	22	33	72″	185
16.	G.V.	26	27	71″	175
17.	P.V.	24	24	68″	156
18.	J.S.	28	29	73″	222
19.	W.A.	16	23	66″	150
20.	S.C.	24	25	72″	171
21.	H.H.	26	23	70″	149
22.	W.L.	36	25	66″	171
23.	H.G.	24	25	68″	167
24.	F.F.	22	24	69″	155
25.	J.F.	38	23	72″	170

seems reasonable to deduct that a quadriceps strength of less than fourteen pounds is abnormally weak. Other correlations as to age, sex, weight and height might be made but for our purposes the establishment of the minimal normal strength is most important.

The Quadriceps Femoris in Osteoarthritis

Observations on many patients with osteoarthritis of the knees has emphasized the importance of quadriceps weakness as a factor in this disease. Recently we have recorded the strength of the quadriceps femoris and related it to the degree of subjective pain. Table II shows nine cases which illustrate some of the observations which we have made. Pain is described in terms one to four plus; four plus refers to pain at rest and disabling pain

TABLE II.

Name	Age	Sex	Duration of Treatment		Before Pain	Before Strength	After Pain	After Strength
			8	R	+	12	±	20
Mrs. D.	56	F	8	L	4+	4	2+	13
			14	R	2+	5	±	13
Mrs. T.		F	14	L	0	12	0	
			18	R	0	18	0	18
Mr. K.	54	M	18	L	3+	0	0	10
Hydrocortisone used			62	R	2+	3	+	10
Mrs. D.	75	F	62	L	4+	1	+	10
Hydrocortisone used			90	R	±		±	13
Mrs. B.	55	F	90	L	4+	0	2+	12
				R				
Mr. H.	70	M	18	L	3+	3	+	12
			8	R	4+	4	+	7
Mrs. T.	72	F	3	L	0	12	0	12
			9	R	2+	8	0	12
Mrs. G.	58	F	9	L	4+	2	+	6
			22	R	3+	5	0	14
Mr. M.	61	M	22	L	0	8	0	14

tion for slings, et cetera, is wrapped with either stockinet or wide adhesive tape, with four long pieces left to attach the bar to the ankle. It is securely wrapped about the foot and ankle, so that the spreader bar is beneath the tarsal arch. Then, by means of two orthopedic weight hangers, progressively increasing weight can be added. The subject is seated on a high examining table so that the weights do not touch the floor. The subject is then asked to extend his knee with weights attached to the bar beneath the foot. The maximum weight which can be extended ten times has been tabulated in the table below. Both knees were tested, and in our experience no significant difference was noted between the two extremities in the individual case. The subjects consisted of members of the resident and visiting staffs of St. Joseph Mercy Hospital.

The data presented demonstrate the wide range of strength in normal quadriceps muscles. In these twenty-five cases the range was from a minimum of fourteen to a maximum of forty. It

on weight bearing; three plus is severe pain on weight bearing; two plus is enough pain to bring the patient in for help, and one plus refers to a joint not free from pain but not severe enough to be troublesome.

The table illustrates that in each case severe pain is associated with weakness in the quadriceps and as strength is increased the pain is lessened.

Treatment of Osteoarthritis of the Knee

Patients with osteoarthritis in the knees present a wide range of degree of involvement. Some with extreme destruction of the cartilage may require surgical intervention. Some may require a period of bed rest and traction. However, the greater number of patients seen in ordinary practice respond to treatment somewhat more conservative than these two methods. We have found a program based on physical therapy with the addition of other measures as indicated by the symptoms to be most satisfactory.

The actual program of treatment varies from

one case to the next. Practically all are placed on regular doses of salicylates and weight reduction is encouraged where overweight exists. If pain is very severe many cases are immediately given hydrocortisone into the joint space. All of the cases are seen by the therapist who gives heat and massage for control of pain and swelling, and passive exercise as needed to insure complete range of motion. Heavy resistance exercises are administered in the manner as described for testing. The patient, sitting on the edge of a table, is required to lift the maximum weight which he can lift ten times. This is repeated at home three to ten times daily, increasing the weight as the strength returns. It is essential that exercise be given with the knee in a nonweightbearing position. Only in this way can strength be regained without further damaging the knee cartilages. The patient should be cognizant of this fact or he will be sure to use stair-climbing as a substitute and suffer a return of his symptoms.

From our observations on the quadriceps muscle in normal and osteoarthritic knees we are convinced that a strong quadriceps is the first prerequisite to rehabilitation of a painful osteoarthritic knee. Our program of treatment, then, always includes heavy resistance exercise for the quadriceps and other forms of treatment are added as indicated by the symptoms. Weight reduction, salicylates and vitamin supplements are frequently used. Hydrocortisone in the joint may be used as a means of quick but temporary relief from pain during the initial period of exercise. Many gratifying results from the use of this drug have been obtained. However, several patients who received immediate benefit from Hydrocortisone and exercise relapsed as soon as the exercise was neglected and could be brought under control with reinstitution of the exercises.

Discussion

It has been shown by others that in unstable knees, greater than normal quadriceps power is essential to compensate for instability due to ligamentous injury or arthritis. Repeated episodes of swelling and pain in the knee lead to more quadriceps atrophy, which in turn results in greater joint laxity thus establishing a vicious cycle. With progressive resistance exercises to the quadriceps, this vicious cycle can be broken. Another factor contributing to quadriceps atrophy is that with involvement of the knee joint with arthritis, an abnormal habit pattern is established because of pain or weakness, which is often very difficult for the patient to break. If such a habit does not allow normal quadriceps activity, a relative disuse results and strength is never fully recovered except by therapeutic exercise.

In an extensive series of cases, most of which were traumatic in origin, the only symptom of exercise given in this manner was soreness of the quadriceps muscle, with no swelling or fluid appearing in the knee joint. This lends support to the physiologic soundness of this approach to the problem. Muscle, atrophied from disuse, will respond to heavy resistance exercises in much the same fashion as normal muscle. After exercises have been started, there is a rapid rise in strength for the first few weeks, followed by more gradual increments which may continue for months or even years. The initial improvement in strength is in excess of that which can be explained on the basis of morphologic changes in the muscle. This initial rapid rise has been attributed to motor-learning.

Conclusion and Summary

Heavy resistance exercises must be the first item in the conservative management of osteoarthritis of the knee. Other forms of treatment are added as indicated by the symptoms. In the preceding paragraphs the normal function of the quadriceps muscle is described and data indicating strength of the quadriceps in a series of normal subjects are presented. The relationship of quadriceps strength to pain in osteoarthritis has been emphasized and a program of treatment based on this relationship has been discussed.

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Heparin and Heparinoid Toxin in the Pathogenesis of Hyperfibrinogenemia in Chronic Arthritis

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HYPERFIBRINOGENEMIA is encountered in all forms of rheumatic disease. It parallels somewhat the erythrocyte sedimentation rate although instances of wide divergence are frequently seen. The pathogenesis of hyperfibrinogenemia is little understood, regardless of the fact that studies were carried out on the plasma fibrinogen more than half a century ago. Woolbridge[10] reported his findings on the relationship of fibrinogen to blood coagulation during the years 1884 to 1889, but it was not until more recent years, since the development of adequate methods of quantitative determination of plasma fibrinogen, that interest in the problem of hyperfibrinogenemia has assumed greater importance.

An increase in the plasma fibrinogen level is not specific for the rheumatic diseases. Although information about the substances which affect this plasma protein may lead to a better understanding of the pathogenic mechanism of arthritis in particular, it may lead also to a better understanding of the pathogenesis of all the other conditions in which it occurs. The increase in plasma fibrinogen is a good index of rheumatic activity, being highest when the disease is the severest and returning to normal as the disease subsides. It serves therefore as the best co-index available to the time honored erythrocyte sedimentation rate, and by the same token serves as the best single index available to determine the efficacy of any therapeutic regimen. It is becoming recognized as the more dependable of the two indices because of its slower fluctuations, and for this reason serves as the best guide in the treatment of chronic arthritis. Because the height of the plasma fibrinogen level is so closely associated with the severity of the symptoms, more information about the substances which raise or lower the amount of fibrinogen may lead to better methods of controlling this ravaging disease.

Several substances are now known to affect the plasma fibrinogen level. Corticotropin and cortisone are known to depress the plasma fibrinogen, but rarely do these substances bring the level to normal in patients with active arthritis. The plasma fibrinogen level returns to its previously elevated state as soon as the hormone is stopped.

Protamine sulfate[5] has been found to produce a very significant effect on the plasma fibrinogen level. This substance has long been known as a powerful antagonist of heparin and that it will also attack thromboplastin when given in sufficient quantities. Protamine sulfate carries a very heavy positive electric charge and this fact accounts for its extreme reactive behavior. It shows a very selective affinity for heparin and heparin-like substances and will neutralize all available heparin substances in biological fluids before reacting with anything else. This is because heparin carries the strongest negative electric charge of any organic compound found in the animal body. These characteristics of protamine sulfate and heparin make it certain that heparin and heparin-like substances are the first to be exhausted in the body fluids and tissues when protamine sulfate is given repeatedly in small amounts. This procedure brought about a gradual lowering of the plasma fibrinogen level which strongly indicates that an excess of heparin or of a heparin-like substance plays a major role in the pathogenesis of hyperfibrinogenemia.

Heparin is a natural physiologic substance and plays a very important part in the body economy. Its therapeutic action when given in relatively large amounts as an anticoagulant is well known, but little is known about its possible physiologic role as an enzyme or as a metabolite in tissue anabolism and catabolism. The fibrous tissue throughout the body is very rich in glucuronic acid and glucosamine and these two substances are the main building blocks in the heparin molecule. Just what part heparin may play in the metabolism of connective tissue remains yet to be determined. However, some of the physiologic effects of heparin, other than the well known anticoagulant action, are apparent in the blood and the tissues, and may be measured in terms of its effect on the plasma fibrinogen level.

In the rheumatic diseases the plasma fibrinogen level is elevated during the active phase of the

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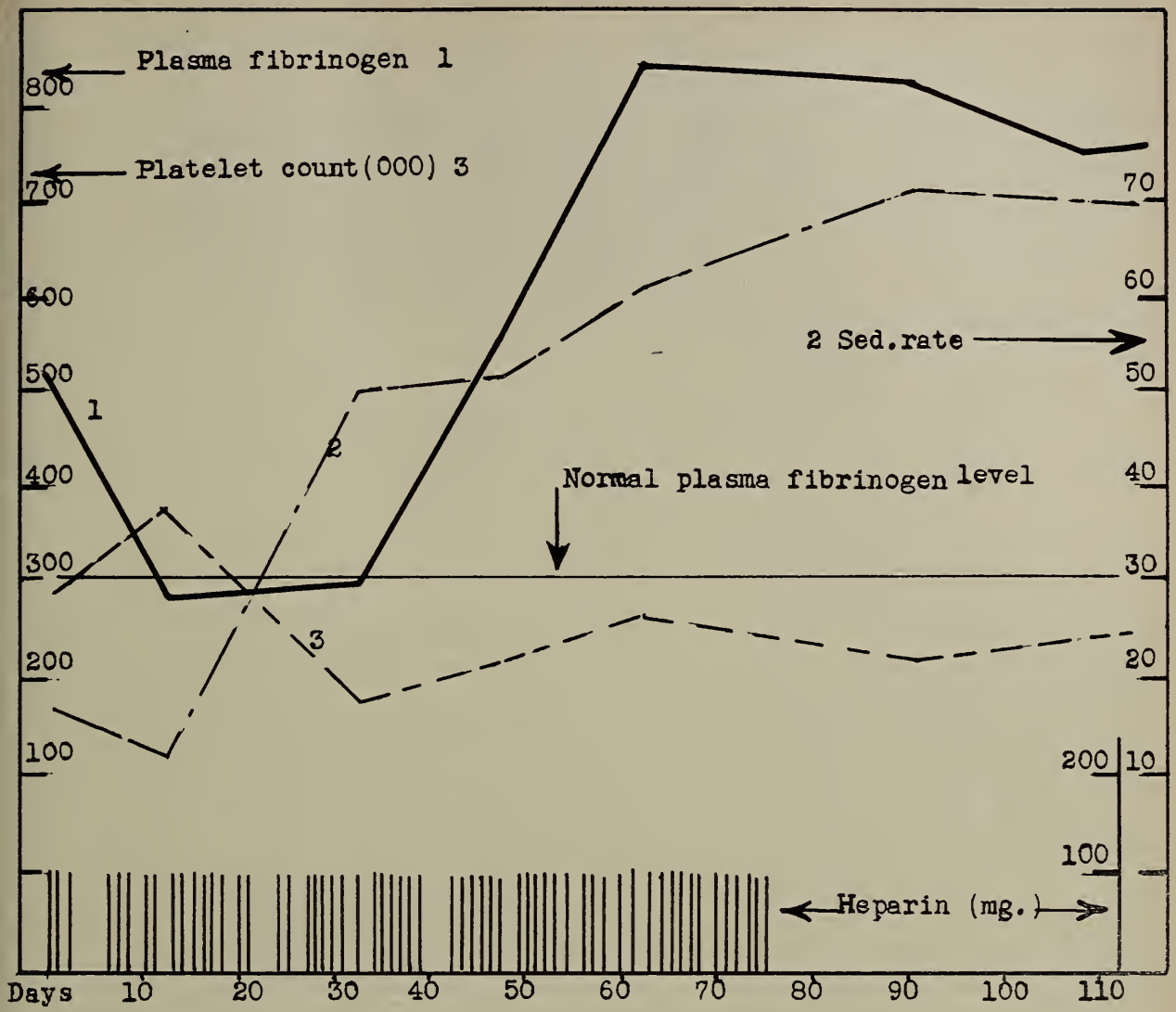


Fig. 1. Graphic presentation of data obtained on a man, aged forty-nine, with severe rheumatoid arthritis for thirteen years, showing response of the plasma fibrinogen level to treatment with heparin.

disease, and it has been found that protamine sulfate given in small amounts daily will gradually lower the amount of fibrinogen in the plasma, not by its direct reaction with the fibrinogen, but by its neutralizing effect on heparin and heparin-like substances. This makes it appear that a chronic excess of heparin may be the cause of the increased plasma fibrinogen level and therefore the necessity of determining the behavior of the plasma fibrinogen when a known chronic excess of heparin is created or when an already existing excess is supplemented, becomes very important. An analysis of the curves of the plasma fibrinogen level made during the administration of a chronic excess of heparin to arthritis patients with hyperfibrinogenemia indicates that it is not heparin itself that is in excess, but rather a heparin-like substance which is toxic rather than physiologic. The present report deals with these findings.

Procedure

Heparin in gel was added to the daily intramuscular injections of corticotropin in gel given to chronic arthritis patients showing a constant residual hyperfibrinogenemia. The heparin administration was maintained at a level which was just insufficient to cause any significant change in the coagulation time,[2] heparin retardation clotting time[8] or the protamine titration[1] of the blood. Along with other blood studies the erythrocyte sedimentation rate was determined by the method of Westergren[9] and the plasma fibrinogen level was determined by the method of Ratnoff and Menzie.[7] Heparin was also added to the daily injection given

TABLE I. DATA ON TWENTY-ONE ARTHRITIS PATIENTS TREATED WITH HEPARIN.

					Initial Period							Ultimate Period						
No.	Case	Age	Sex	Diagnosis	Pre-treatment Plasma Fibrinogen mg./100	Sed. Rate	Platelet Count	Lgth. of Treatment Days	Amount of Heparin	Interim Treatment Lowest Fibrinogen Mg./100	Per Cent Drop in Fibrinogen	Lgth. of Treatment Days	Total Heparin	Post-treatment Fibrinogen Mg./100	Sed. Rate	Platelet Count	Per Cent Rise Fibrinogen	Remarks
1.	H.C.	51	M.	Fibrositis	356	11	261,000	6	1.000	304	14.6	6	1.000	304	17	403,800	0	Symptoms cleared completely.
2.	C.L.	52	Fe.	Fibrositis	505	14	394,000	5	.800	505								Symptoms not changed.
3.	M.C.	40	Fe.	Rheumatoid arthritis, grade III	760	52	266,000	15	1.100	725	4.7	24	1.900	1170	62	405,000	61.3	Symptoms improved first two weeks, then progressively worse.
4.	R.W.	48	Fe.	Rheumatoid arthritis, grade II	690	42	317,520	12	1.900	570	17.4	12	1.900		68	94,160	0	Symptoms greatly improved. Drop in platelet count. Treatment stopped.
5.	M.Q.	64	Fe.	Rheumatoid arthritis, 9 yrs., gr. III	955	95	192,390	31	1.950	450	52.9	31	1.950		34	389,000		General improvement.
6.	E.S.	52	M.	Rheumatoid arthritis 12 yrs., gr. III	817	22	330,600	34	2.650	476	41.8	76	3.950	768	70	230,000	61.2	Much improved first month. Then worse.
7.	R.M.	48	M.	Rheumatoid arthritis 12 yrs., grade III	505	18	305,000	12	.850	292	42.2	62	4.750	858	62	280,350	193	Greatly improved first 2 weeks. Then progressively worse.
8.	J.G.	46	Fe.	Rheumatoid arthritis 8 yrs., grade II	462	10	210,000	16	1.300	455	1.3	51	4.100	514	3	305,000	12.9	Condition unchanged.
9.	C.G.	52	Fe.	Mixed arthritis, 6 yrs.	466	4	185,000	30	1.100	440	5.6	58	2.200	505	23	306,900	12.5	Condition unchanged.
10.	D.G.	35	M.	Mixed arthritis	652	13	89,300	13	.950			13	.950	753	15	355,000	15.4	Much worse. Refused further treatment.
11.	N.G.	50	Fe.	Rheumatoid arthritis 19 yrs., grade III	653	93	396,000	28	1.700	615	6.1	56	2.100	757	81	373,500	23.9	Condition largely unchanged.
12.	W.M.	56	M.	Psoritic arthritis 10 yrs	379	11	521,000	17	1.500	128	66.2	17	1.500	128	10	217,000		Much improved.
13.	E.W.	39	Fe.	Rheumatoid, grade II	546	34	220,000	99		395	38.2	99	3.750	395	35	265,000		Moderate improvement.
14.	V.E.	56	Fe.	Rheumatoid arthritis grade II	611	41	218,000	23	1.200	505	20.7	54	2.300	505	89	221,500	0	Condition unchanged.
15.	B.M.	54	Fe.	Rheumatoid arthritis grade III	757	61	154,700	39	1.750	635	19.2	99	3.150	1570	65	350,000	147.2	Moderate improvement first month, then worse.
16.	O.W.	51	Fe.	Rheumatoid arthritis grade III	531	44	330,000	48	.900	631		92	1.800	1420	45	241,000	167.4	Gradually worse.
17.	A.S.	55	Fe.	Rheumatoid arthritis grade II	790	76	340,600	31	1.300	583	33.9	91	3.300	583	60	322,660	0	Condition unchanged.
18.	E.K.	46	M.	Acute rheumatoid arthritis, grade I	565	18	406,800	26	1.300	550	2.7	60	4.500	550	56	580,600		Condition improved.
19.	R.F.	60	M.	Rheumatoid arthritis grade III	505	48	460,000	28	1.200			28	1.200	650	60	220,000	28.7	Condition unchanged.
20.	G.C.	44	M.	Fibrositis asthma	208	11	224,000	50	2.200			50	2.200	583	14	349,000	180.2	Condition unchanged.
21.	W.C.	56	M.	Rheumatoid arthritis grade II	377	25	302,000	26	1.550			26	1.550	420	35	278,000	11.3	Improved first week, then progressively worse.

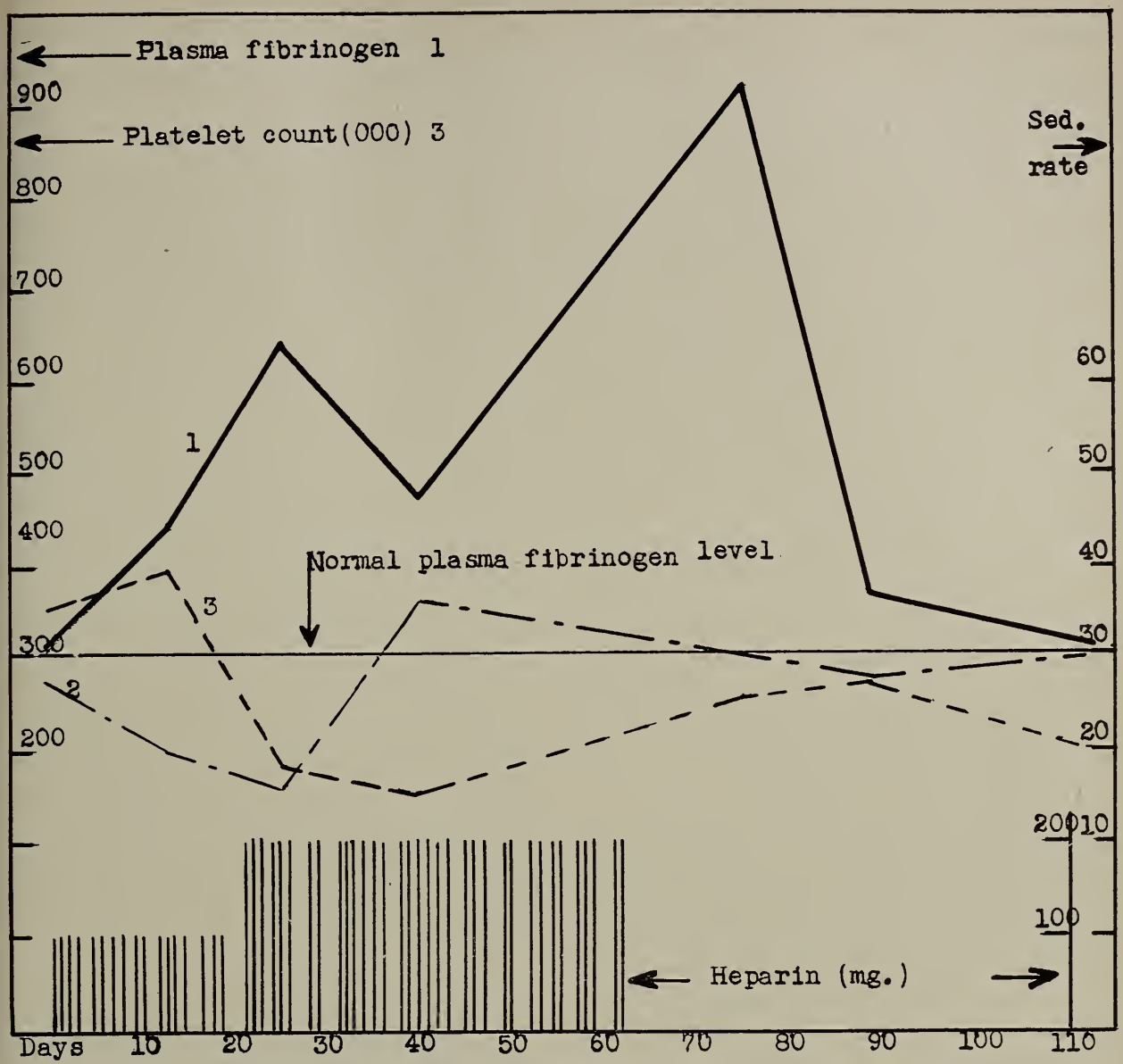


Fig. 2. Graphic presentation of data obtained on a non-rheumatic man aged thirty-four, showing the response of the plasma fibrinogen level to treatment with heparin.

to three non-rheumatic patients showing a mild hyperfibrinogenemia under corticotropin treatment for another purpose, in order to compare the results in rheumatic and non-rheumatic states.

Results

The data obtained are summarized in Table I. Supplementing the corticotropin treatment with heparin at first lowered the plasma fibrinogen level and later caused it to rise. Fifteen of the twenty-one patients studied showed a definite lowering of the fibrinogen, ranging all the way from 1.3 per cent to 66 per cent, with an average of 24.5 per cent. During this phase of the treatment two thirds of the patients showing a drop in the plasma fibrinogen level experienced a definite improvement in their clinical condition, while one-third remained about the same.

Eighteen of the twenty-one patients were given heparin over a period of thirteen days or longer and of these, twelve showed a very decided rise in the plasma fibrinogen level ranging from 11.3 per cent to 193 per cent with an average of 61.6 per cent for the period treated. Seven of the twelve patients experienced a marked aggravation of their clinical symptoms which persisted for some time after the heparin was stopped. Fourteen of the twenty-one patients showed an increase in the erythrocyte sedimentation rate during the time heparin was given.

Figure 1 shows the actual data obtained in *Case 7* (Table I) which illustrates the effect of heparin in a patient with severe rheumatoid arthritis. The plasma fibrinogen level was reduced to the normal range for the first month of treatment, but as treatment continued the fibrinogen began to rise. It remained elevated indefinitely, long after the heparin was discontinued. The erythrocyte sedimentation rate was normal at the beginning of heparin, but began to show a rise before any increase in the fibrinogen was noted. The sedimentation rate also remained high indefinitely after the heparin was stopped. It required a relatively small amount of heparin, only a total of 5,900 milligrams, to produce these changes as compared to the 8,500 milligrams to produce comparable changes in a non-arthritic patient.

Figure 2 shows the effect of heparin in a non-arthritic individual. The plasma fibrinogen level was near normal before the heparin was started but soon began to rise. The heparin was continued until the plasma fibrinogen level had reached 930 milligrams per cent. The erythrocyte sedimentation rate was only slightly affected. The plasma fibrinogen level returned to normal in a short time after the heparin was discontinued.

The clinical signs and symptoms of arthritis were greatly improved during the time the plasma fibrinogen level was reduced by heparin in the arthritic case, but later became greatly aggravated as the plasma fibrinogen level rose above normal. In contrast to this, the non-arthritic patients did not experience any untoward symptoms whatsoever during the time the plasma fibrinogen level was greatly elevated.

Discussion

Heparin and protamine sulfate have a great affinity for each other because of the very high positive and negative electric charges carried by these substances. The plasma fibrinogen level is lowered by protamine sulfate, therefore, not by its direct reaction with the fibrinogen, but by its neutralizing effect on heparin and heparin-like substances. This is strong evidence that the plasma fibrinogen level is elevated by the presence of an excess of some member of the heparin family.

Heparin itself is a non-toxic natural physiological substance found in many body tissues and is highly necessary to the body economy, but it is not a single compound. It is a mixture of the polysulfuric esters of the polysaccharide mucotin, and its exact molecular configuration still remains obscure. It is composed largely of molecular units of acetylated glucosamine and glucuronic acid combined in uncertain numbers. From a chemical point of view, heparin is similar to chondroitin sulfuric acid, which is a mixture of the polysulfuric esters of the polysaccharide chondroitin. The main chemical difference is that chondroitin sulfuric acid found in cartilage contains units of acetylated chondrosamine instead of the units of acetylated glucosamine found in heparin. The number of molecular units of acetylated glucosamine and glucuronic acid in heparin appears to vary with the tissue source and this probably accounts for the great variation in its anticoagulant property. Polysulfuric esters of a great number of the polysaccharides have heparin-like properties, but none have yet been found or synthesized which are altogether non-toxic when used internally. Natural heparin has not yet been duplicated in the laboratory.

Members of the heparin family are widespread in nature and all show a wide variation in the degrees of toxicity. Jorpes[3] found the pharmacologic activity to range from physiologic in natural heparin to that of extreme toxicity in some of the synthetic heparin-like compounds. He found heparin-like substances that caused agglutination of blood platelets in concentrations as low as 0.000005 per cent.

The common characteristic of all members of the heparin family is that of preventing coagulation of the blood. They have the ability to cleave the lipoid fraction from the protein portion of thromboplastin, thereby rendering it inactive. Normal heparin as it is found in the various tissues of the body is the only member of the group that is able to do this while preserving the blood platelets at the same time. All other known members of the heparin family agglutinate and destroy blood platelets. From this brief review of the character of heparin and heparinoid substances, it is not difficult to realize that a slight alteration in the synthesis of heparin may produce a compound very similar to the normal one but with certain toxic properties, which renders it unfit for physiologic use. Such an abnormal heparin compound because of its inherent properties would have a tendency to exhaust the thromboplastin mechanism.

The part played by heparin in the anabolism and

catabolism of connective tissue is a matter of conjecture. It is, however, interesting to note that the hydrolysis of connective tissue yields the same glucuronic acid, glucosamine, sulfuric acid and acetic acid moieties found in the hydrolysis of heparin. Morrione[4] observed the formation of collagen fibers by the action of heparin on collagen solution under the electron microscope. Such observations add strength to the conjecture that heparin and the synthesis of heparin are closely allied to the process of fibrogenesis and the metabolism of fibrous tissue.

A study of the data in Table I shows the general tendency of the plasma fibrinogen level to drop when heparin treatment was first started in arthritis patients showing a mild hyperfibrinogenemia. This would not occur if the body was already burdened with an oversupply of heparin. In that case, one would expect the plasma fibrinogen level to be very sensitive to the additional heparin injected and rise immediately. This finding, along with the fact that these patients were clinically better under the first part of the heparin treatment when the plasma fibrinogen level was lower, favors the view that an actual heparin deficiency exists in these patients.

Since protamine sulfate lowers the plasma fibrinogen level quite readily and because of its known affinity for heparin and heparin-like compounds and since there is definitely not an oversupply of heparin itself present, then it is rational to conclude that protamine sulfate reacts with a heparinoid substance which is pathologic and which is responsible for the elevated plasma fibrinogen. The fact that the heparin treatment lowered the plasma fibrinogen indicates that it supplied a need for heparin which the body had not been able to meet.

A study of Table I further shows that as the heparin treatment continued, the plasma fibrinogen began to increase, and continued to do so as long as the heparin was continued. During this rise in the fibrinogen the clinical symptoms were aggravated. These findings were interpreted to indicate that an excess of heparin had been reached and the excess heparin was now inactivating thromboplastin in conjunction with the heparinoid substances already formed in the body, thereby causing a compensatory fibrinogen increase beyond its original level. The fact that the plasma fibrinogen did not return to its original level after the heparin treatment was discontinued indicated that the toxic substance primarily responsible for its elevation was continually being formed, thereby maintaining the thromboplastin mechanism in an increased and continual state of partial exhaustion. In contrast to this the plasma fibrinogen level quickly returned to normal in all three non-arthritic subjects treated with heparin, indicating an adequate thromboplastin mechanism in these patients (Fig. 2). The chronic state of partial exhaustion of the thromboplastin mechanism in the arthritic is also demonstrated by the relatively small amount of heparin necessary to produce an increase in the plasma fibrinogen in the arthritic as compared with the non-arthritic. The total heparin used, as shown in Table I, in each case was only a small fraction of the amount necessary to produce a comparable rise in the fibrinogen in the non-arthritic patients as illustrated by the data on one of them, shown in Figure 2.

Since members of the heparin family are natural antithromboplastins and since the data in this study shows that an excess of normal heparin does not exist in the arthritis cases studied, it is concluded that the chronic state of partial exhaustion of the thromboplastin mechanism is produced by a toxic heparin-like substance generated in the patient's own body. This partial exhaustion of thromboplastin apparently stimulates the production of fibrinogen to compensate for the thromboplastin insufficiency in the blood-coagulating process, which is just another manifestation of one of nature's many protective compensatory systems of balances and counterbalances.

Further evidence in support of this conclusion has been obtained by the use of toluidin blue.[6] This dye reacts very readily with members of the heparin family both *in vivo* and *in vitro*. Using this dye as a heparinoid detoxicating agent by giving 10 to 15 mg. *per os* six to ten hours before 50 to 100 mg. injections of heparin, the plasma fibrinogen level showed a greater and more consistent drop and did not show the later rise unless a comparatively large amount of heparin was used. The toluidin blue studies add confirmation to the other evidence that a heparin-like substance is present and demonstrates that it can be neutralized both by this dye and by protamine sulfate.

Conclusions

1. The fact that protamine sulfate will reduce the hyperfibrinogenemia associated with chronic

arthritis indicates that a member of the heparin family is the hyperfibrinogenic substance.

2. The fact that heparin caused a reduction in the plasma fibrinogen level at first, indicated that heparin itself was not the hyperfibrinogenic factor.

3. The fact that heparin administration at first reduced the plasma fibrinogen level and later increased it, indicated that because of its anti-thromboplastin activity, heparin produced an increase in the partial chronic insufficiency in the thromboplastin mechanism.

4. The fact that the plasma fibrinogen level was increased by chronic heparin administration indicated that a partial chronic insufficiency of thromboplastin stimulated the fibrinogen production.

5. The fact that heparin administration at first lowered the plasma fibrinogen level indicated a heparin insufficiency in the body in chronic arthritis.

6. The fact that a heparin produced thromboplastin insufficiency elevated the plasma fibrinogen level, indicated that, since heparin itself was deficient in the chronic arthritic, that a heparinoid substance was elaborated in the body.

7. The fact that the plasma fibrinogen level failed to return to its previous level after heparin administration was stopped, as it did in the non-arthritic, indicated that the heparinoid substance also inactivated thromboplastin and continued to maintain the increased level of thromboplastin insufficiency produced by the heparin.

8. The fact that the thromboplastin insufficiency was maintained at the high level set up by the heparin administration indicated that the heparinoid substance continued to inactivate thromboplastin at a time when the thromboplastin was physiologically insufficient and therefore demonstrated that the heparinoid substance formed in the body was toxic because its action was contrary to the body's natural system of balances and counterbalances.

9. The fact that considerably less heparin was tolerated in the arthritic as compared with the non-arthritic indicated that an insufficiency existed in the thromboplastin mechanism before the heparin treatment was started.

Acknowledgment

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The Effect of Placental Thromboplastin on the Hyperfibrinogenemia in Rheumatic Disease

By Earl A. Peterman, M.D.
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INTEREST in the substances which affect the plasma fibrinogen level was tremendously enhanced by the finding that protamine sulfate[2] had the ability to greatly reduce the hyperfibrinogenemia found in rheumatic disease. Protamine sulfate has long been known as a heparin antagonist and the conclusion was reached that an excess of heparin or a heparin-like substance played a major role in the production of hyperfibrinogenemia.

In subsequent studies[3] using heparin, it was found that an excess of heparin itself was not the cause of the hyperfibrinogenemia, but it was indicated that a heparin-like substance which was toxic, rather than physiologic, played the major role. All members of the heparin family have the inherent ability to inactivate thromboplastin, and the indications of an insufficiency in the thromboplastin mechanism in chronic arthritis gave additional strength to the previous evidence that a heparinoid substance was the hyperfibrinogenic factor. Fibrinogen is the main target for the thromboplastin mechanism in the process of blood coagulation. Clotting is a very vital life saving property of blood and this mechanism is always maintained in a vigilant state of minute fluctuating activity by a complicated and delicate system of natural balances and counterbalances. The slightest depletion of the thromboplastin mechanism by heparin or a heparinoid substance, instantly affects the natural balance between fibrinogen and thromboplastin and immediately acts to counterbalance the insufficiency of thromboplastin by stimulating an increase in the fibrinogen content of the plasma.

Having strong indications that an insufficiency in the thromboplastin mechanism played a major role in the increased production of plasma fibrinogen, the next logical step was to determine the effect of the administration of thromboplastin on hyperfibrinogenemia.

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Procedure

A very potent and highly purefied thromboplastin was prepared* from fresh human placentae. This was placed in rectal suppositories each containing 100 mg. to which was added 10 mg. trypsin.

Rheumatic patients having a marked hyperfibrinogenemia were given three suppositories daily. Among other blood studies, the plasma fibrinogen,[4] erythrocyte sedimentation rate[5] and the platelet count were taken at intervals.

For statistical purposes the normal range of plasma fibrinogen, according to the method used, was from 250 mg. per cent to 350 mg. per cent and the average figure of 300 mg. per cent was therefore used in the calculations. The plasma fibrinogen up to 300 mg. per cent was considered normal and only the amount above 300 mg. per cent considered as abnormal or "hyper." Therefore, when the plasma fibrinogen level was reduced to the 300 mg. per cent level the hyperfibrinogenemia was reduced 100 per cent. Otherwise, a 100 per cent reduction would mean a complete afibrinogenemia.

Results

The data are tabulated in Table I. There were four rheumatic fever patients ranging from five to eleven years in age. The sedimentation rates ranged from 24 to 100 and the plasma fibrinogen ranged from 767 mg. per cent to 1400 mg. per cent. Patient 1 showed a 95.5 per cent reduction in the hyperfibrinogenemia in fifteen days time. The sedimentation rate also dropped to normal.

Patient 2 showed a 75.4 per cent drop in the hyperfibrinogenemia on thromboplastin alone in twenty-one days and then relapsed. Patient 2A is the same child in relapse. Ten mg. of pure crystalline trypsin was added to the suppositories and the hyperfibrinogenemia was reduced 100 per cent in ten days time. During a total of one month of treatment the erythrocyte sedimentation rate dropped from a high of 100 to a low of 3.

Patient 3 showed a 100 per cent reduction in the hyperfibrinogenemia in seventeen days time. The erythrocyte sedimentation rate was 61 before the treatment was started and was still 36 when the hyperfibrinogenemia was completely reduced, but dropped to normal subsequently.

Patient 4 required thirty-nine days to reduce the hyperfibrinogenemia 92.3 per cent on thromboplastin alone. No trypsin was used. The potentiating effect of the thromboplastin cofactor can be seen by comparing the thirty-nine days required in

*Difco Laboratories, Detroit.

TABLE I. DATA ON EIGHTEEN PATIENTS TREATED WITH PLACENTAL THROMBOPLASTIN

No.	Case	Age	Sex	Diagnosis	Pre-treatment				Post-treatment				Remarks
					Plasma Fibrinogen mg/100 cc.	Sed. Rate	Platelet Count	Days of Treatment	Plasma Fibrinogen mg/100 cc.	Sed. Rate	Platelet Count	Per Cent Reduction in Hyperfibrinogenemia	
1	R.H.	10	M	Rheumatic fever 2 mos.	1400	34	590,000	15	349	19	440,000	95.5	Complete remission.
2	D.D.	11	M	Acute rheumatic fever 1 wk.	910	100	225,000	21	450	42	420,000	75.4	Partial remission on thromboplastin only. Relapse.
2A*	D.D.	11	M	Rheumatic fever 1 mo.	908		229,000	10	298	3	456,000	100	Complete remission when trypsin was added.
3	S.P.	5	F	Rheumatic fever 3 mo.	1110	61	390,000	17	243	36	390,000	100	Complete remission, sed. rate dropped later.
4	T.S.	9	F	Rheumatic fever 2 yrs. Acute chorea 1 wk.	767	24	250,000	39	345	5		92.3	Complete remission on thromboplastin only.
5	H.H.	41	F	Rheumatoid arthritis grade II, 8 yrs.	1310	59	363,660	30	515	25	194,360	78.7	Improved.
6	M.W.	61	F	Chr. chorea since age of 11 yrs.	1752	36	360,300	11	404	22	260,000	92.8	Marked clinical improvement.
7	M.C.	47	F	Rheumatoid arthritis grade II, 23 yrs.	780	50	331,200	15	520	13	378,000	54.3	Improved. ACTH discontinued.
8	V.E.	57	F	Rheumatoid arthritis grade II, 10 yrs.	1414	53	150,000	16	550	35	290,000	77.5	Improved. ACTH discontinued.
9	M.C.	44	F	Rheumatoid arthritis grade II, 10 yrs.	1161	55	290,000	14	681	24	224,000	55.7	Improved. ACTH discontinued.
10	H.O.	47	M	Rheumatoid arthritis grade I, 4 yrs.	890	72	448,000	16	505	44	362,000	65.2	Improved. ACTH discontinued.
11	B.K.	48	F	Rheumatoid arthritis grade I, 5 yrs.	1040	40	300,300	16	575	40	478,000	62.8	Improved.
12	C.G.	52	F	Mixed arthritis	780	55	407,000	11	450	23	273,000	68.9	Improved. ACTH discontinued.
13	O.W.	52	F	Rheumatoid arthritis grade III	1000	95	221,000	16	658	46	420,000	48.8	Improved. ACTH discontinued.
14	V.B.	57	F	Rheumatoid arthritis grade III	871	94	501,000	16	460	49	233,000	71.9	Improved.
15	W.M.	57	M	Arthritis and psoriasis	1000	36	699,100	13	550	50	390,000	64.2	Improved.
16	R.M.	49	M	Rheumatoid arthritis grade III	1410	62	229,000	13	576	43	533,000	75.1	Improved. ACTH discontinued.
17	J.G.	47	F	Rheumatoid arthritis grade III, 9 yrs.	2121	62	267,000	24	793	76	280,000	78.4	Improved.
18	N.G.	52	F	Rheumatoid arthritis grade III, 20 yrs.	1666	78	429,280	26	879	98	532,600	57.6	Improved.

*Same case as No. 2.

Case 4 with the fifteen, ten, and seventeen days required in *Cases 1, 2a,* and *3,* respectively, in which the cofactor was used.

Patients with rheumatoid arthritis showed a high percentage reduction in the hyperfibrinogenemia also, although the reduction was not as marked as that seen in the rheumatic fever group. Seven of the fifteen rheumatoid arthritis patients that had been on long term corticotropin treatment improved sufficiently to discontinue the corticotropin.

Discussion

The problem of administering a highly potent thromboplastin preparation to patients with a plasma fibrinogen level several hundred per cent above normal was approached very cautiously because the danger of intravascular clotting was well appreciated. It was soon learned that our thromboplastin preparation in normal saline installations was well tolerated by the lower bowel and that the first evidence of its absorption was a central nervous system sedation, even in patients with only a slight rise in the plasma fibrinogen. Extending our observations from this point, no untoward results have been encountered from thromboplastin administration by rectal installation regardless of the height of the plasma fibrinogen level. No evidence of intravascular clotting has been manifested.

At some time within the first ten days, the early beneficient results in the first few cases began to fade and the thromboplastin, regardless of amount, apparently lost its effectiveness. It was then realized that, although the placental thromboplastin was extremely potent, it did not contain the necessary thromboplastin cofactors.

The enzyme, trypsin, was shown by Ferguson, Travis, and Gerheim[1] in 1948, to be a thromboplastin cofactor, activator and potentiator. When trypsin was added to the treatment the original effectiveness of the thromboplastin was not only reinstated, but was actually potentiated.

In order to determine the effectiveness of the thromboplastin cofactor by itself, a small series of arthritis patients, with a marked hyperfibrinogenemia, were treated with daily intramuscular injections of 10 mg. of pure crystalline trypsin and another small series were given rectal suppositories containing 10 mg. of the purefied trypsin,* for a period of three weeks. At the end of that time there was no significant change in the plasma fibrinogen level or sedimentation rate in either series.

While it is not within the scope of this paper to discuss the clinical changes produced by the thromboplastin treatment, it should be pointed out in passing that no untoward symptoms whatsoever were encountered, regardless of the height of the hyperfibrinogenemia or the amount of thromboplastin used. It might also be said that the clinical improvement in the patient was well reflected in the figures showing the percentage improvement in the hyperfibrinogenemia. From a clinical standpoint more time and more study are needed for proper evaluation.

*Difco Laboratories, Detroit.

Conclusions

1. Highly purefied placental thromboplastin is readily absorbed through the mucosa of the large intestine.

2. Placental thromboplastin effectively reduces the hyperfibrinogenemia associated with rheumatic disease.

3. Placental thromboplastin does not contain the necessary cofactor.

4. The enzyme trypsin is an effective activator and potentiator of placental thromboplastin.

5. The enzyme trypsin is readily absorbed through the mucosa of the large intestine.

Acknowledgment

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A Clinical Study of Phenylbutazone (Butazolidin) in Various Types of Arthritis

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DURING the past two years a great deal of interest has been shown in this country in the use of phenylbutazone for the treatment of the various types of arthritis. This drug was first introduced and evaluated in Switzerland and Germany. Promising results were reported, as noted by an extensive review of European literature by Kuzel and associates.[12] The following study was undertaken to evaluate the clinical response of this drug in a group of patients at the Detroit Receiving Hospital Arthritis Clinic.

Methods

There were a total number of eighteen patients treated. In this group eight had rheumatoid arthritis; five had mixed arthritis (osteo and rheumatoid); two had acute infectious arthritis; and one had acute recurrent gout. The criteria used in the diagnosis, classification, and evaluation of these arthritis disorders were based on the Manual for Arthritis Clinics.[13] The duration of the disease in these patients varied from two weeks to eleven years.

Previous treatment varied from several weeks to several years and consisted of routine physiotherapy, diathermy, analgesic, gold, liniments, x-ray therapy and cortisone. Fair to little response had been noted in these patients studied.

The stages* of rheumatoid arthritis varied from II (moderate) to IV (terminal). The majority were in stage III (severe) and functional impairment varied from class II** to class III, the majority belonging to class III (able to perform only a few or none of the duties of self care). Ages varied from eighteen to sixty-seven. (See Table I for a summary of data above and below.)

Dosages

The majority of patients were started initially on 600 mg. of phenylbutazone orally every day for periods ranging from one to several weeks (200 mg. three times daily). As soon as a good response was noted the dosage was reduced in the next succeeding weeks from 600 mg. a day to a maintenance dose of 200 mg. every day or every other day. In four of the more acute cases an initial dose of 800 mg. was used. The average number of weeks 800 mg. was administered was three weeks; 600 mg. for 2.8 weeks; 400 mg. for 3.8 weeks; and 200 mg. for 2.5 weeks. For control purposes several of the patients were taken off the drug and replaced on previous therapy and their reactions were observed.

Duration of Treatment

This varied from one week to twenty-four weeks. The average duration was seven weeks. The longer periods of treatment were usually associated with the chronic rheumatoid arthritis cases or the combined osteoarthritis and rheumatoid arthritis patients.

Preparation Previous to Treatment

All patients were given a complete physical examination with special attention being paid to any evidence of previous or present congestive heart failure or gastrointestinal disease. Preliminary laboratory work consisted of a hemoglobin determination, red, white and platelet counts, urinalysis, serum sodium, potassium, chloride, and a sedimentation rate. Liver function tests were performed on any patient with a history suggestive of hepatic disease. Patients with a past history of any type of cardiovascular disease were watched carefully for any gain in weight and if necessary were placed on a rigid low salt diet to counteract the sodium-retaining ability of this drug.[23]

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This study was supported by Michigan Chapter, Arthritis and Rheumatism Foundation, and Geigy Pharmaceutical Company.

*Stages
I Early
II Moderate
III Severe
IV Terminal

** Class
1. Complete functional capacity.
2. Normal activities despite discomfort.
3. Can perform few duties of usual occupation or self care.
4. Incapacitated, bedridden, or confined to wheelchair.

TABLE I.

Case	Age	Diagnosis	Major Joints Involved	Stage	Function	Length of Disease	Previous Treatment	Response To Butazolidin		
								Response	Grade	Function
1.	67w/f	Osteo and Rheumatoid Arthritis	hands, spine, knees, right shoulder	II	III	6 yrs.	Analgesics Physiotherapy	Fair	II	II
2.	40w/m	Marie - Strumpell Arthritis	entire spine hip joints	IV	III	9 yrs.	Analgesics X-ray therapy	Poor	II	I
3.	46c/f	Mixed Arthritis, Osteo & Rheumatoid Arthritis	left wrist & hand, spine, rt. elbow, rt. shoulder jt.	III	III	6 yrs.	Cortisone Gold	Moderate relief	III	II
4.	56w/m	Rheumatoid Arthritis	knees, wrists, & rheumatoid nodules	III	III	10 yrs.	Analgesics Heat Massage	Moderate relief	II	I
5.	51c/m	Rheumatoid Arthritis	feet, elbows, hands, shoulders, knees	II	II	11 yrs.	Analgesics Liniment Heat	Fair	II	I
6.	54c/m	Rheumatoid Arthritis	knees, ankles hands, elbows	II	III	4 yrs.	Analgesics	Slight	II	I
7.	34c/m	Rheumatoid Arthritis	1-s spine, hands rt. & lft. hip joint	III	III	8 yrs.	Diathermy, Physio Gold- 4 courses Cortisone- 1 course	—Fair —None	III	II
8.	62w/f	Osteo and Rheumatoid Arthritis	hands, wrists spine (t & l)	II	II	2 yrs.	Analgesics Physiotherapy	Very little	III	II N.C.
9.	62c/m	Osteo and Rheumatoid Arthritis	knees, hands	III	III	10 yrs.	Analgesics Cortisone Gold Physiotherapy	Very little	II	I
10.	49w/m	Osteo and Rheumatoid Arthritis	knees, ankles, c-v spine, elbows rt. shoulder	III	III	12 yrs.	Analgesics Cortisone Gold Physiotherapy	Very little	II	I
11.	62w/m	Osteo Arthritis	spine	advanced	II	1 yr.	Analgesics	Very little	None	II N.C.
*12.	45c/m	Arthritis Infectious	right knee	—	—	3 wks.	Analgesics PCN Sulfa.	Very little	Good response	
13.	28c/f	Rheumatoid Arthritis Acute	rt. & lft. wrist ankle, subcut. nodules legs	I	IV	2 wks.	Analgesics	Slight relief	75% I	I
14.	33c/m	Rheumatoid Arthritis Acute Episode	right and left hands	II	II	2 yrs.	Analgesics PCN	Very little	II	I
15.	41w/f	Gout, acute recurrent 4th attack	left foot	—	—	2 yrs.	Colchicine	No response	Excellent response	
*16.	18c/m	Acute Arthritis Infectious	left hip	—	—	5 wks.	Analgesics PCN Codiene Tolserol	Very little	Excellent relief of pain & spasm	
17.	67w/f	Traumatic & Osteo Arthritis	both knees rt. shoulder	severe	IV	8 yrs.	Diathermy Physiotherapy Analgesics	Very little	Very good 80% relief	III
18.	62w/m	Rheumatoid Arthritis	hands, knees shoulders	II	II	1 yr.	Analgesics	Very little	III	I

* denotes in-patients

During treatment with phenylbutazone the above laboratory work was repeated every week for the first month and then every other week for the next four to five weeks; later every three or four weeks.

Rheumatoid Arthritis.—(See Table II, for survey of results.)

Objective Results: These were based on the Therapeutic Criteria for Response of Rheumatoid Activity as set forth in the Manual for Arthritis Clinics.[13] It was found that of the eight Rheumatoid Arthritis cases, five cases (63 per cent) had a grade† II (major) response; two (25 per cent) had a grade III (minor) response, and one case had a grade I response.

Subjective Results: These were based on the classification of Functional Capacity.‡ The patients were classified previous to treatment with phenylbutazone and after an optimal response was noted they then were reclassified. It was found that previous to treatment, three cases were in Class II, four cases were in class III, and one case was in class IV. After treatment with phenylbutazone the results obtained were as follows: three class II cases and three class III cases were in class I;

†Grade—I Complete. II Major improvement. III Minor improvement. IV Unimproved.

‡Class—I Complete, able to carry on all duties without handicaps. II Adequate for normal activities. III Limited. IV Incapacitated, largely or totally.

TABLE II. RESPONSE TO TREATMENT

Rheumatoid Arthritis	Grade (objective)	Class (functional)			
		Pretreatment		During treatment	
5 cases (63%)	II	cases 3	II	cases 7	1 (87%)
2 " (25%)	III	4	III	1	11 (13%)
1 "	I	1	IV		
8 cases total					
Combined Arthritis					
3 cases (60%)	II	4	III	2	1 (40%)
2 " (40%)	III	1	II (one class II showed no change)	3	11 (60%)
5 cases total					
Combination of above two groups					
1 case	I	5	II	9	1 (69%)
8 " (61%)	II	7	III	3	11 (23%)
4 " (30%)	III	1	IV	(one case Class II no change — 8%)	
13 cases total					

one class IV case was in class I, and one class III case was in class II.

Thus, seven or eighty-seven per cent of the rheumatoid arthritis cases were improved in respect to functional capacity to class I, and one case (13 per cent) showed improvement to class II.

Combined Osteo and Rheumatoid Arthritis Group.—

Objective Results: Criteria used here are similar to that for the rheumatoid arthritis cases and showed that three cases (60 per cent) had a grade II response and two cases (40 per cent) had a grade III response.

Subjective Results: It was noted that previous to treatment four patients were in class III, and one patient in class II. After treatment two class III cases were improved to class I, and two to class II. One class II patient showed no improvement.

In combining the results of both the above groups it was found that 61 per cent or eight patients had a grade II objective response to treatment, 30 per cent or four patients a grade III response, and one case a grade I. The subjective results were found to be somewhat more marked in both groups. About 70 per cent or nine cases of the thirteen improved to class I after treatment and three patients or twenty-three per cent to class II.

In most of the above patients the subjective results were excellent. There were several patients who obtained such improvement that they were able to undertake light work. Two cases who had to use crutches found that they could get along well without them. It was also noted that the drug had to be continued on a maintenance basis (200 mg. every day or every other day) to obtain the above results. In most cases if the drug was discontinued, the patient would revert to his former state. In three cases the drug has been discontinued for from two to eight weeks, no regression has been observed.

Osteoarthritis.—The one pure case (No. 11) of osteoarthritis of the spine did not respond to therapy, and after three weeks of treatment the drug was discontinued. In the combination osteo and traumatic arthritis case (No. 17) there was marked symptomatic relief. The patient had been in a wheel chair for the past two years and was in a class IV functional state. After four days of treatment with phenylbutazone she was able to walk without much pain and was then reclassified to class III. There was about an 80 per cent relief of pain noted in this patient.

Acute Infectious Arthritis.—Both these cases (No. 12, No. 16) were treated routinely with aspirin and codeine for relief of pain and spasm of joints involved, with poor results. Twenty-four to forty-eight hours after the start of phenylbutazone a 75 per cent to 80 per cent relief of pain and spasm was noted. Both patients were discharged

completely free of the above complaints and had complete freedom of motion of the joints. Duration of treatment for these patients was three weeks. There was no recurrence of pain or spasm after the drug was discontinued.

Gout.—One case (No. 15) was treated. This was a forty-one-year-old white woman who had had three previous attacks of acute gout of the left big toe. The patient was again started on colchicine but no response was obtained. Phenylbutazone was then started in dosages of 800 mg. every day (200 mg. four times daily) and the patient had a complete remission in forty-eight hours. Blood uric acid fell from a high of 8 mg. per cent before treatment to a low of 3.5 mg. per cent during treatment.

Laboratory Results

Hemoglobin.—It was noted that in eight patients there was a drop of 1 to 1.5 grams of hemoglobin. This occurred usually between the first and second weeks of treatment. Only one patient (case No. 7) showed a 2-gram decrease between the first and second week of treatment. This patient's hemoglobin fell no further after the second week.

Platelets.—Routine platelet counts showed the most marked changes. There was a notable decrease in five cases. The average fall in number was about 150,000; this occurring during the first week of treatment. The lowest count obtained was 113,760. The greatest fall noted in any patient was 172,980 (case No. 3).

White Blood Count.—No undue change was noted here. The lowest white blood count was 5,200. The largest fall in any patient was 5,000. No patient exhibited granulocytopenia.

Electrolyte changes.— Routine serum sodium, potassium, and chloride studies were performed. No changes were seen in the serum potassium or chloride. There was usually a slight increase in the serum sodium during the first week of treatment. This, however, usually fell to normal after a low salt diet was instituted. The largest rise of serum sodium was in case No. 7, from 140 m.Eq./L to 157 m.Eq./L.

Sedimentation Rate.—No significant change occurred in the sedimentation rates even in those patients showing marked improvement.

Liver Function Tests.—The cephalin flocculation test, prothrombin time and bromsulphalein retention were studied in several patients with past histories of liver disease. No abnormalities were noted. This result was similar to that obtained by Byron and associates.[2]

Complications

A total of seven patients (39 per cent) developed complications, the primary one being gain in weight. There were six patients who had a weight increase from two to nine pounds, with an average of four pounds. This usually occurred towards the end of the first week of treatment and was noted to be present in the over forty age group. Only one patient (case No. 1) developed frank congestive heart failure. She was adequately controlled by mercupurin injections and discontinuation of the drug. This was the only case in this series in which the drug had to be stopped. One other case (No. 6) was noted to have two plus ankle edema. The remainder showed gain in weight without demonstrable edema.

One patient (case No. 2) complained of a sensation of warmth soon after taking phenylbutazone. This was considered to be of minor significance and on continuation of therapy slowly disappeared.

There were two patients (11 per cent) who developed drug rash. This was mild in nature. In one case (No. 3) it consisted of a pruritic erythematous dermatitis of the left foot. This was complicated by a secondary infection which necessitated hospitalization. Following discontinuance of phenylbutazone the rash cleared. Upon readministration of the drug, there was no recurrence of the dermatitis. The other patient (case No. 10) had a mild erythematous rash of the right leg which slowly disappeared when the dose of the drug was reduced from 400 mg. to 200 mg. every day.

A few of the patients had a mild gastric upset after taking the drug. It was recommended that the drug be taken during or after a meal and these complaints were reduced to a minimum.

No other complications were noted in this study.

Comment

The evaluation of this drug is based on subjective and objective results. As has been previously reported by various authors[3,14,19] the subjective response obtained is usually excellent. In this study of eighteen patients, only two (11 per cent) did not obtain a favorable subjective response to

treatment. One of these had an osteoarthritis of the spine and the other a combined osteoarthritis and rheumatoid arthritis. The rest (89 per cent) had good to excellent responses. In several, there was dramatic relief of pain within twenty-four to forty-eight hours after the start of treatment. Many of these patients had reached the point where no relief was obtained from the routine analgesics and it is not deemed advisable to have these patients rely on continual use of narcotics. Thus the use of phenylbutazone appears to breach the gap between the usual analgesics and narcotics. In addition, there does not appear to be any addiction qualities connected with the use of this drug.

The anti-inflammatory (anti-rheumatic) properties of this drug have been a matter of controversy. While some authors state that they have noted no objective or anti-inflammatory results,[4,8,14] the majority[2,3,12,16,20,22] felt that such results were observed. In this study, it was noted that there were no anti-inflammatory signs obtained while the patients were on the usual analgesics. Phenylbutazone, however, produced definite signs of objective improvement, such as decrease in swelling, redness, and heat, and increase in mobility of joints, and in some cases softening and disappearance of rheumatic nodules. Seventeen patients in this study showed some objective signs of improvement, as noted in Table I, this varying from Grade I to III.

The anti-inflammatory aspect of this drug has been demonstrated by classical methods in a study conducted by Domenjoz.[5] He was also able to demonstrate that the drug has an anti-histamine effect, anti-pyretic action and a marked analgesic effect. It may be of interest to note that a recent report has shown that there may be some beneficial effect obtained in some cases of chronic asthma.[16]

There was only one case of gout in this series and in this an excellent response was obtained. The treatment of this disease has been reported on by several authors[2,3,7,10,12,16] and uniformly good results have been noted.

The complications found in this study were weight increase due to sodium and water retention, slight fall in hemoglobin, platelets, mild gastrointestinal upset, one episode of congestive heart failure, one instance of a sensation of warmth and two cases of drug rash. The only complication considered serious, was the congestive heart failure case, the remainder were of minor significance.

In the use of this drug, however, one must be cautious for there have been reported in recent literature serious and fatal cases of gastrointestinal bleeding,[11,15,17] and blood dyscrasias (agranulocytosis, thrombocytopenia).[1,6,9,18,21] It is noted that most of the above complications occurred in patients beyond the age of forty. Thus, it is very important that this group of patients be followed very closely by weekly blood counts and observed for any evidence of gastrointestinal bleeding. Anyone with a past history of gastrointestinal pathology, cardiovascular disease or liver disease should be completely evaluated before institution of treatment with phenylbutazone.

No drug resistance was observed in the patients studied. When the drug was discontinued there usually was a regression to the pretreatment state, in from several days to a few weeks. In most cases only a very small dosage was required for maintenance.

Summary

1. *Eighteen patients* were treated with phenylbutazone in this study: eight had rheumatoid arthritis, five combined osteo and rheumatoid arthritis, two osteoarthritis, two acute infectious arthritis, and one recurrent acute gout.

2. *Subjective response* was noted in 16 (89 per cent). In most cases there was marked relief of pain and improvement of functional capacity. Only two cases (11 per cent) showed no improvement; one was a case of osteoarthritis of the spine and the other had combined arthritis.

3. *Objective response* was noted in seventeen patients (95 per cent).

4. One case of *Recurrent acute Gout* responded to treatment with a complete remission in twenty-four to forty-eight hours.

5. *Complications* observed were weight increase, slight fall in hemoglobin and platelets, mild gastrointestinal upset, one episode of congestive heart failure, one case of sensation of warmth, and two cases of drug rash. It was necessary to discontinue the drug in only one case.

6. No *drug resistance* was seen, and response appeared to depend on continuous maintenance doses.

7. It is suggested that in patients over forty careful attention be paid to past history of gastrointestinal pathology and cardiovascular diseases and that these patients be closely followed by reg-

ular blood studies and watched for gastrointestinal bleeding.

8. Phenylbutazone appears to have marked analgesic and moderate anti-inflammatory properties.

9. It is the opinion of the author that this drug has a definite place in the treatment of various arthritic disorders, but should be used in carefully selected patients.

Acknowledgment

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Subdeltoid Bursitis

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SUBDELTOID bursitis is a painful condition of the shoulder which was originally described by Codman[7] in 1906. A multiplicity of terms has been assigned to the affection denoting the early misconceptions of the site of initial pathological involvement. Thus, Codman used the term of subdeltoid bursitis since he first believed inflammation of the bursa to be the primary lesion. Sandström[15] suggested the name of peritendinitis calcarea to convey his impression that the calcific deposits were located in the peritendinous tissues of the musculotendinous cuff of the shoulder. Others have employed such terms as subacromial bursitis, periarthritis, Duplay's disease, calcareous tendinitis and simply calcification of the supraspinatus tendon. In the light of subsequent histopathological study, calcareous tendinitis appears to be the preferred term. Subdeltoid bursitis has been widely used, however, and it is doubtful that it will be replaced.

Etiology and Pathology

The incidence of this disease is highest in the middle years of life, between the ages of forty and sixty. Its etiology has been a subject of considerable controversy. Codman first thought it resulted from traumatic impingement of the subdeltoid bursa between the greater tuberosity of the humerus and the acromial process of the scapula. Infections, endocrine disturbances, faulty metabolism, vitamin deficiencies, and thermal changes have been suggested as possible etiologic factors but have not been substantiated. Painter[13] in 1907, first observed the shadows of lime salt deposits in the soft tissues about the shoulder roentgenographically, and believed them to lie in the wall of a thickened bursa. Wrede[16] in 1912, demonstrated that these calcifications were located in the supraspinatus tendon, rather than the bursa. His observations have been corroborated in many subsequent studies, notably those of Brickner,[3] Moschowitz[12] and more recently Pedersen and Key.[14] Codman later came to regard the alterations in the supraspinatus tendon as the initial lesion. These changes consisted of small hemorrhaginous deposits in the tendon due to strain and trauma which later became calcified. Moschowitz demonstrated the lesion to be a tendinitis with degeneration of the fibers and calcification. He attributed these changes to traumatic disturbance of the meager blood supply to the tendon. He found no blood pigment to indicate the presence of focal hemorrhages as did Codman. Pedersen and Key studied surgical biopsy material removed from the supraspinatus tendon. They observed that the relatively avascular tendon fibers undergo degeneration with subsequent calcium deposition in the necrotic collagenic tissue. A "calcium granuloma" then forms which may or may not contain sufficient calcium to be demonstrated on the roentgenograms.

From these findings it has been concluded that the lesion described in the tendon is the result of the attrition of a normal aging process in the juxtaarticular structures of a joint not ideally suited to serve the prehensile upper extremity. The floor of the subdeltoid or subacromial bursa is in intimate contact with the underlying supraspinatus tendon and becomes secondarily inflamed locally or may become generally inflamed if the calcareous deposit ruptures into it. In processes of long standing, calcification of the bursal wall may occur. Brickner[4] found adhesions in most of the bursae upon which he operated.

The changes described refer to those occurring in the supraspinatus tendon and subdeltoid bursa because they are the most frequently involved. In the clinical evaluation of a patient with shoulder pain, the possibility of similar involvement of the subscapularis, infraspinatus, teres major or other tendons with their associated bursae must be considered.

Clinical Findings

Clinically, the disease is usually classified into acute, subacute, and chronic forms depending upon the severity and duration of the symptoms. Young[17] considered symptoms of less than a week in duration to represent an acute bursitis, symptoms of one week to two months' duration to be subacute bursitis, and symptoms of longer than two months' duration to be chronic bursitis. Patients with acute subdeltoid bursitis complain of pain which may be excruciating and totally disabling. It is usually localized to the region of the greater humeral

From Harper Hospital, Detroit, Michigan.

tuberosity but may radiate inferiorly into the arm and forearm, superiorly into the cervical area or posteriorly into the scapular region. Motion of the shoulder joint is markedly limited due to muscle spasm, particularly in attempts to internally rotate or abduct the arm. Point tenderness may be elicited over the greater tuberosity, frequently associated with local evidence of inflammation such as heat and swelling. Local tenderness may be so marked as to make the mere pressure of clothing intolerable. Active motion may be more markedly restricted than passive motion in the milder cases. Sandström[15] found an increased sedimentation rate in seventy of seventy-five acute cases.

In the subacute and chronic forms of the disease, the diagnosis is more difficult. The patient may give a history of intermittent pain over a period of months, possibly years. Occasionally acute exacerbations may be superimposed on a chronic course. Restriction of motion may be more definite than in the acute form and passive motion is generally more limited. Contraction of the muscles from prolonged splinting may be of such degree as to allow only minimal movement. Bursal and joint adhesions frequently occur necessitating manipulation under anesthesia.

Fractures, coronary insufficiency, primary and metastatic bone disease, brachial neuritis, cervical and shoulder arthritis and rupture of the supraspinatus tendon are conditions which must be differentiated clinically from subdeltoid bursitis.

Roentgenographic Findings

Roentgenograms of the involved shoulder should always be made as a preliminary step to treatment, particularly in the subacute and chronic forms, to eliminate arthritis and other lesions as causes for the patient's symptoms. In conducting the roentgenographic examination, at least two exposures should be made, one with the arm in external rotation and the other with the arm in internal rotation. One of these should be made stereoscopically to further aid in evaluating the findings. In the acute cases, it may be necessary to utilize soft tissue technique to demonstrate hazy or cloudy calcific deposits of recent origin. Others have suggested the use of fluoroscopy, spot film roentgenography and multiple projections. Unless some specific indication exists for utilizing these specialized techniques, they are superfluous. Baird[1] proposes examining both shoulders as a routine procedure. Young[17] found calcific deposits in 43.6 per cent of a series of eighty-seven patients. He observed no relationship between the incidence of calcification and the duration of the disease.

Roentgenographically, fractures of the greater tubercle may simulate calcification in the supraspinatus tendon and should be suspected where a history of injury is obtained. Malignant neoplasms of the bone, post-traumatic myositis ossificans, foreign bodies, vascular calcification and parasitic calcification may be confused with the calcareous deposits in subdeltoid bursitis and tendinitis.

It should be emphasized that the size of the calcium deposit bears little relationship to the severity of symptoms, to the response to treatment or to the likelihood of recurrence. Such deposits often are found accidentally in roentgenograms made for other purposes in patients who are asymptomatic.

Treatment

Numerous methods have been suggested for the treatment of subdeltoid bursitis, including the application of local heat, rest with sedation, physiotherapy, novocaine injections, needle irrigation of the bursa, surgical excision and surgical drainage of the bursa, roentgen irradiation and hormonal injections.

Roentgen irradiation has emerged as a proved, conservative method of treatment. In comparing the results of physiotherapeutic management with the results of roentgen therapy, Klein and Klemes[10] found a longer period of disability and infrequent calcium reabsorption where physiotherapy was used. Roentgen therapy reduced the period of disability and resulted in reabsorption of the calcium in most patients. In considering the statistical results of treatment, it is important to realize that 12 per cent of their series of patients spontaneously absorbed their calcium deposits with rest alone. Jones[9] also states that the possibility of spontaneous recovery is insufficiently emphasized. He observed spontaneous reabsorption of calcified deposits within fourteen to twenty-eight days in six cases treated by rest, sedation and active exercise within the limits of pain. Therefore, the ability to materially shorten the period of disability is the best criterion on which to assess the value of treatment.

Caldwell and Unhauf[5] found roentgen therapy to be effective in 85 per cent of their cases.

Chapman[6] obtained marked improvement or a complete cure in 77 per cent of all cases exhibiting

TABLE I. NUMBER OF CASES OF SUBDELTOID BURSITIS TREATED BY ROENTGEN THERAPY AT HARPER HOSPITAL

1935	1	1944	108
1936	0	1945	213
1937	3	1946	247
1938	3	1947	254
1939	4	1948	243
1940	11	1949	299
1941	11	1950	304
1942	36	1951	325
1943	50	1952	296

calcification and in 58 per cent of all cases without calcification. In those patients with symptoms of one to thirty days in duration, 94 per cent were improved or cured; one to twelve months in duration, 77 per cent were improved or cured; one year or more in duration, 33 per cent were improved or cured. In his experience a much better response to treatment was obtained where the disease was acute in nature and of short duration. This has been the experience of most other observers.

Baird[1] obtained excellent results in the acute and subacute forms of the disease and in 50 per cent of the chronic cases he treated. He demonstrated reabsorption of calcium deposits in acute cases within twenty-four to forty-eight hours following treatment.

Brewer and Zink[2] noted complete relief in eleven of fourteen patients with acute subdeltoid bursitis. Varying degrees of relief were observed in about 30 per cent of patients with chronic disease.

Recently, Hollander and his co-workers[8] obtained good results with the local injection of hydrocortisone into the bursa. They state, however, that many cases of chronic bursitis responded poorly. The reported series is small and the authors believe that a specific antiphlogistic effect at the tissue level must account for the effects observed.

A review of the total number of cases treated at Harper Hospital from 1935 through 1952 (Table I), shows a great increase in the incidence of bursitis during the last decade, a fact which is also pointed out by Lightbody.[11] Whether this represents an apparent or actual increase is difficult to determine.

The irradiation technique in this institution consists of administering 100-125 r (measured in air) over the involved shoulder through an anterior portal. Four treatments are given, the first two at weekly intervals, and the second two at biweekly intervals. Frequently, concomitant similar treatments are given to the entire cervical spine. The factors used are: 200 kv., 1 mm. Cu plus 1 mm. Al filtration, a half-value-layer of 1 mm. Cu, and a focus-skin-distance of 50 cm. The entire series may be repeated at a later date if necessary, although one or two additional treatments usually prove adequate if the initial series does not result in relief of symptoms. Supplementary physiotherapy is used where stiffness and muscle contraction has occurred.

Conclusions

1. Roentgen therapy is well established as the preferred treatment for subdeltoid bursitis or calcareous tendinitis.

2. A high percentage of acute and subacute forms of the disease is cured and a sufficient number of chronic cases responds favorably as to warrant a trial of therapy in every case.

3. Treatment should be administered as early in the disease as possible.

4. Roentgen therapy has the additional advantage of being conservative, it shortens the period of disability and it appears to hasten reabsorption of the calcareous deposits.

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Vacuum Phenomenon in the Lumbosacral Disc

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ONE characteristic of tissue degeneration, whether due to aging or to trauma, is progressive dessication. In most organs this drying-out process is evident merely as a loss in volume. In certain tissues, where loss of volume may be limited by surrounding rigid structures, we may detect this tissue loss as an actual space, or hiatus, as the "vacuum phenomenon."

Free gas, described as a vacuum, was first visualized as a thin radiolucent streak in a lumbar intervertebral disc by W. Magnusson[4] in 1937. Magnusson considered the dark line seen on a lateral lumbar roentgenogram as due to the hyperlordotic position and did not interpret the finding in terms of an abnormal sign. In 1942 Folke Knutsson[3] first hypothesized that the vacuum phenomenon signified disc degeneration with the presentation of three cases; the first of these being similar to our cases in that a thin horizontal radiolucent streak extended through the lumbosacral disc center. The other two cases were also of similar disc changes, but not in the lumbosacral joint. These latter cases were associated with spondylosis deformans in one instance and osteochondrodystrophy in the other. Under the title of "Phantom Nucleus Pulposus," J. Gershon-Cohen[1] reported three cases in 1946. All three exhibited a persistent vacuum sign in the fifth lumbar disc. It is of note that the vacuum sign remained over several months and could be demonstrated on all radiographic projections.

Similar findings have been reported in true joints; the shoulder, the knee, the fingers and the symphysis pubis. These have been seen both with pathologic joints and in joints placed under tension. A pull of approximately 1 kg-m. per square centimeter of joint surface is sufficient to produce a momentary vacuum in a normal joint.[2] Dittmar originally demonstrated this radiographically in the knees of children in 1932.

The intervertebral disc, not being a true joint, does not yield a spontaneous vacuum sign unless degenerated. Little doubt can be expressed that the radiolucent streak seen on the roentgenogram is anything but body gases under negative pressure. The hypothesis by Gershon-Cohen that it may be fat is untenable in view of Schmorl's work[6] on post-mortem specimens which, in 25,000 spines, reveals no corresponding abnormality. More apropos to the present instance is Schmorl's study on the normal and abnormal progressive dessication of the intervertebral disc. The water content is of great importance to the shape as well as the function. Keyes and Compere determined that the disc was 88 per cent water in the newborn, 80 per cent in the adolescent, and 70 per cent in the seventy-two-year-old. Püschel undertook intensive research at the Schmorl Institute in which the difference between the water content of the fibrous ring and the nucleus pulposus was investigated. He demonstrated the same water content for all the discs, regardless of the vertebral level, in any one spine so long as normal tissue was concerned. An abnormal disc invariably contained less water. He found the nucleus possessed more fluid than the annulus fibrosus. In the newborn the ring possessed 78 per cent water and the nucleus 88 per cent. This high difference of 10 per cent decreased in the course of life. In the third decade the annulus contained 70 per cent water and the nucleus 76 per cent. It was found that the ring contained from then on during life a water content of 70 per cent while the nuclear water diminished progressively. Under normal circumstances the nucleus eventually is dehydrated the same as the ring. In the instances of disc degeneration the nucleus dessicates more than the ring and it is in these cases in which one may detect the vacuum sign. A space appears within a drying disc in the same manner in which a slit appears within a drying log. The residual strength of surrounding fibrous tissue maintains and supports this space.

Although pressure readings have not been taken to date, the production of an absolute vacuum would seem impossible, particularly since the alteration persists over months.[3,6] Magnusson has shown that at 37° C. a pressure of one-twentieth of an atmosphere permits the release of the gas from blood or tissue. The gas would accordingly be carbon dioxide, oxygen, a small amount of nitrogen and water vapor. The exact percentages await proper analysis.

In our analysis of 302 cases of low back pain in which radiographs were made, there were six cases of vacuum phenomenon in the intervertebral



Fig. 1. A roentgenogram of the lumbosacral joint of a fifty-eight-year-old woman, showing the fifth lumbar vertebra, small and transitional in type, with the disc space considerably narrowed. The adjacent bones are sclerotic. The disc itself presents a linear area of radiolucency.



Fig. .2 A lateral projection roentgenogram of the lumbosacral joint of a fifty-one-year-old man, showing the fifth lumbar intervertebral disc of reduced height. with minimal adjacent sclerosis and a linear, well demarcated radiolucency.

discs. Four were localized to the lumbosacral joint, thereby making the incidence in this location 1.3 per cent. This percentage is probably high because the case selection from our practice tends toward older individuals. The percentage does show that the condition, while uncommon, is not a rarity.

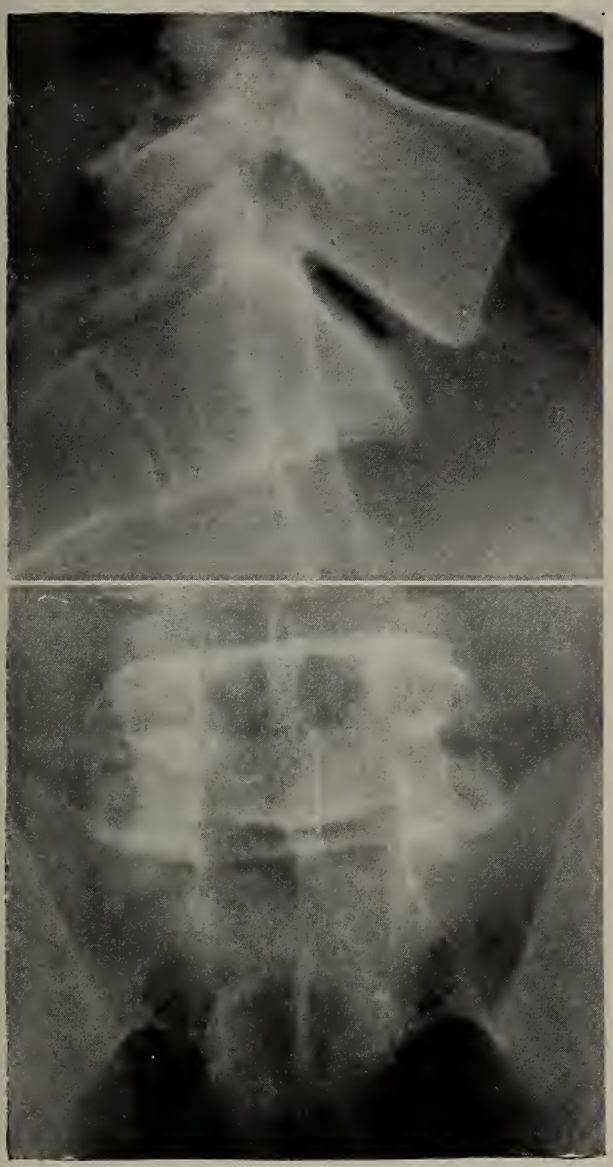
Figure 1 is a lateral projection roentgenogram of a fifty-eight-year-old woman's lumbosacral joint, whose symptoms were low back pain. The fifth lumbar vertebra is small and transitional in type, with the disc space considerably narrowed. The adjacent bones are sclerotic. The disc itself presents a linear area of radiolucency.

Figure 2 is a lateral projection roentgenogram of a fifty-one-year-old man's lumbosacral joint. He gave a history of severe back injury twenty years previously, with subsequent intermittent backache upon fatigue. Neither this nor the other three cases had radiating pain, sciatica, nor signs which would render one suspicious of prolapse of a disc into the spinal canal. This roentgenogram presents a fifth lumbar intervertebral disc of reduced height, with minimal adjacent sclerosis and a linear, well demarcated radiolucency. This band is located somewhat toward the lower portion of the disc and anteriorly projects in a "fish tail" manner upward.

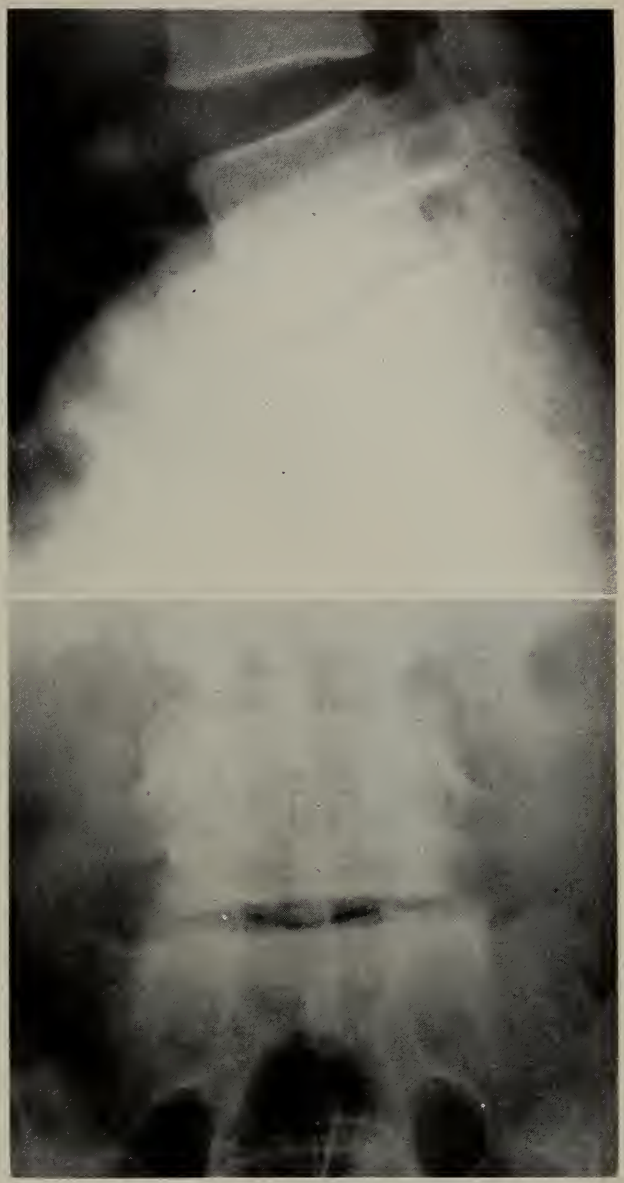
Figures 3 and 4 are those roentgenograms of a fifty-four-year-old man with chronic low back pain and no previous history of trauma. The vacuum phenomenon is well demonstrated in the lateral projection. The darkened area is confined to the central portion and is slightly bifurcated toward its anterior aspect. In the anteroposterior projection, the gas is only poorly defined because the central ray was not directed in the plane of the disc.

Figures 5 and 6 represent anteroposterior and lateral projections of the lumbosacral joint of a fifty-two-year-old man, again with chronic intermittent low back pains. There was no significant history of trauma. The radiolucency extends almost the full expanse of the intervertebral disc. which is reduced in height. It fails to reach the anterior margin by approximately 1 cm. One can readily see the vacuum in the anteroposterior projection because here the central ray was accurately directed through the plane of the intervertebral disc.

Vacuum phenomenon is a roentgen diagnosis



Figs. 3 and 4. The roentgenograms of a fifty-four-year-old man, showing the vacuum phenomenon in the lateral projection. The darkened area is confined to the central portion and is slightly bifurcated toward its anterior aspect. In the anteroposterior projection, the gas is only poorly defined because the central ray was not directed in the plane of the disc.



Figs. 5 and 6. The anteroposterior and lateral projections of the lumbosacral joint of a fifty-two-year-old man, showing radiolucency extending almost the full expanse of the intervertebral disc, which is reduced in height. One can see the vacuum in the anteroposterior projection because here the central ray was accurately directed through the plane of the intervertebral disc.

which insofar as these cases and all other reported cases are concerned correlates with lumbago. The roentgenography is simple in that the radiolucent band is easily identified in the lateral projection. The sign is not well seen in the anteroposterior view or in diagnostic films of the abdomen unless the central ray is properly directed. Contrary to the statement of Schinz[5] it is not necessary to place the patient in hyperlordosis. The sign persists in all positions including weight bearing. It remains over a period of months and may well be a permanent feature of the patient's spine.

Inasmuch as the vacuum sign is but one facet of disc degeneration, associated findings are the rule. Osteoarthrosis is frequently coexistent, as well as regional bone sclerosis and reduction in the height of the disc. The age distribution of the patients likewise follows the pattern of a degenerative disease. The earliest case reported is at age thirty-eight.[1] Our four cases were in their fifties.

(References are on Page 996)

Annual Michigan Postgraduate Program for Graduates in Medicine

The Michigan State Medical Society, in co-operation with the University of Michigan Medical School, Wayne University College of Medicine, and the Michigan Department of Health, announces the extramural semi-annual postgraduate program for the fall of 1953:

Place	*Date*
Alpena	Thursday, October 15
Battle Creek	Tuesday, October 6
Bay City	Wednesday, October 14
Flint	Tuesday, November 10
Jackson	Tuesday, October 20
Lansing	Tuesday, October 27
Mt. Clemens	Wednesday, October 7
Muskegon	Friday, November 20
Traverse City	Thursday, November 5
Upper Peninsula	
Marquette	Tuesday, November 10
Houghton	Wednesday, November 11
Ironwood	Thursday, November 12
Escanaba	Tuesday, November 10
Memominee	Wednesday, November 11
Iron Mountain	Thursday, November 12
Sault Ste. Marie	Friday, November 13

The following intramural courses will be given at the University Hospital, Ann Arbor:

Basic Sciences	September 28, 1953-June 5, 1954
Clinical Internal Medicine	Thursdays, October 1-December 17, 1953 January 7-April 15, 1954. 1:30-5:00 P.M.
Clinical Exercises for Practitioners	Wednesdays, October 7-December 16, 1953 10: A.M.-5:00 P.M.

Further information may be obtained by writing to:

H. H. Cummings, M.D., Chairman
Department of Postgraduate Medicine
University Hospital, Room 2040
Ann Arbor, Michigan

Our Profession—To Which We Owe So Much

In writing this, my last President's Page, there naturally comes to mind a kaleidoscope of events that have occurred during the last fiscal year of the State Society. One has only to read the Annual Report of the Council to realize the many facets of the Society's activities. The items included in this report are: Membership (an increase of about 1,500 in eighteen years), Finances, the JOURNAL, Organization, Public Relations, Woman's Auxiliary, Michigan State Medical Assistants Society, Contacts with Governmental Agencies, Contacts with Voluntary Agencies and Organizations, the Society's New Home at 606 Townsend—Lansing, Beaumont Memorial Restoration Committee, and Matters Referred to the Council by the 1952 House of Delegates.

I would like to invite to your attention one of these items particularly, and that concerns the committees of the Society and of The Council. You will note that ninety-five meetings of these two groups of committees have been held, and I wish to remind you that their work is exemplary. I am sure you would be pleased with the sincerity with which the Committeemen go about their work, always mindful of the betterment of the health of the people of Michigan and in a spirit of fairness to all the Doctors of Medicine of the State. Their work is truly reflected in the statement of The Council's Report: "The impressive progress of the Michigan State Medical Society is due, in the main, to these active groups."

I have attended many committee meetings as a guest and observer and I want to commend their work to you for your recognition and applause. There is an enlargement of interest to be found, and friendships to be gained, in working for your State Society. So, if called upon to help, I know you will be well repaid in the satisfaction of doing your part in the furtherance of the objectives of your profession to which you and I owe so much.

President's Message



R. J. Hubbell

State Medical Society

Editorial

MUCKRAKING

MANY TIMES during the past few years, we have invited the attention of our readers to some destructive criticism of the medical profession, and have presented arguments for following a well-outlined and well-considered course through the troubled years. Frequently, untruths and slanders have been uttered in opposition to the ethics or practices of our great mass of active Doctors of Medicine. We and other spokesmen have replied apparently unsuccessfully, in spite of the great new scientific achievements and new methods of practice which in a single lifetime have nearly doubled the life expectancy. Some diseases have been almost eradicated, others have had their sting lessened almost to the vanishing point. A practitioner of only twenty years ago would be lost today.

Yet the criticism of the profession continues. Not a month passes but a critical article appears in some national lay magazine. Recently, Frank Weiser, M.D., Kenneth Babcock, M.D., and our Medical Secretary, L. Fernald Foster, M.D., were called by telephone and asked to prepare an article for one of the "great magazines" outlining the failures or shortcomings of the profession, on the excuse that to air the mispractices would tend to eliminate them.

At a recent hospital staff meeting, discussion drifted to the present great amount of unfriendly publicity, and we recalled to the group the long past era of "muckrakers." How many remember? Only one other doctor present had ever heard the word, or knew the meaning of the expression. There was a period in the history of our social development when news writers (we had no commentators) dug up and published all the smut and unsavory items about a personage or program to which they might be opposed. The era is gone and has left practically no memory.

We may hope that the present false-witness-bearing splurge will meet the same fate. If the active practicing members of the profession will each one accept frankly and enthusiastically his share of the challenge, the result will surely be to our liking.

The bad public relations of the medical profession are known to be the mispractices, misconduct, or ill-advised remarks or actions of a very few, not over 2 or 3 per cent of our members. As long as these nonconforming members continue to make mistakes, the muckraking will continue. It is inexcusable that the 98 or 97 per cent who are doing an amazing job for our public should suffer for the faux-pas of the heedless few.

For our own wellbeing, *each* of our profession *must* see and do his ultimate best. Then, and only then, will the dirt campaign cease.

ANOTHER FIRST?

SEVERAL of the hospital staffs of Southwestern Michigan for months have been conducting a survey of hospital diagnoses and procedures looking to a better understanding of problems, a more thorough preparation for supplying needs, and a more accurate knowledge of experiences. Knowing the percentage occurance of certain diseases or methods of treatment would help to evaluate the measure of success of our hospitals and their staffs.

Within the rather near future, the research and experimentation will be completed and a useful tool will have been devised for continuous hospital and medical use which will end by making the operation of hospital records departments less expensive than it has been in the past, without regard to the size of the institution, particularly for the small hospital.

A considerable amount of data is being accumulated and those in charge of the work wrote the American Medical Association asking whether their IBM machines might be used to analyze and help interpret the material. Surprise was expressed when the American Medical Association indicated they might even extend this survey to other hospitals, or make it generally available. Could there be another "Michigan First?"

AN APPRECIATION

WE ARE again devoting a number of THE JOURNAL to the subject of Arthritis and Rheumatism. Again our thanks are due to James J. Lightbody, M.D., Detroit, and his committee for assembling the host of material which makes up the scientific papers herewith presented. Jim

(Continued on Page 996)

Michigan State Medical Society Past Presidents 1875-1885



In the period from 1875 to 1885, the Michigan State Medical Society, no longer an infant, was growing with an expanding state, and able men from blossoming cities and villages were at the helm. As the decade opened, Ulysses S. Grant was in the White House for his second term, and in Lansing another second-termer, John J. Bagley, was in the Governor's chair. The present State Capitol, started in 1872, was beginning to take form, but not until 1880 was it completed, at the "fabulous" cost of $1,510,130.59!

Midway up state, the village of Clam Lake was incorporated in 1875, not to be dignified as the City of Cadillac until two years later. Much farther north in the Copper Country, and ten years later, Michigan's new College of Mining and Technology opened in Houghton. . . . . And in 1879 the Legislature became aware of public health problems and authorized vaccination at public expense.

Presidents Hayes, Garfield, and Arthur entered and left office, and as the decade came to a close, Grover Cleveland was inaugurated. Between Governor Bagley and the well-known Russell A. Alger, who held office in 1885, were little-remembered Governors David H. Jerome and Josiah W. Begole, but Michigan and the MSMS were well on their way.

(MSMS Past Presidents from 1886 to 1893 will be featured in an early Number.)

AN APPRECIATION

(Continued from Page 994)

Lightbody is indefatiguable in his efforts and made good selections. We are positive our readers will be well repaid for studying the old and the new ideas published. Again: Thank you, Jim.

THE JOURNAL OF THE MEDICAL ASSOCIATION OF GEORGIA

THE MEDICAL ASSOCIATION of Georgia has recently made a study of its *Journal* which is now appearing in a new format and cover design. The cover has a red background, the title appearing in white, with a square uncolored section containing, in the June number (the Annual Session Proceedings number), a photographic reproduction of part of the Hippocratic oath, overshadowed by a gavel. This is all very attractive.

The July number has the same format, but the white space contains a picture of a father and his young son sitting on the end of a pier, fishing, and the motto, "It is later than you think." The paper stock is very good, type clear and easilv readable, the editorials short and snappy. We are pleased to see another medical journal giving some originality and variety to its cover. Congratulations!

MUCH FOR LITTLE

"You get so much for so little" reports a recent Illinois State Medical Society Secretary's Letter. Here's the story:

AMA dues—the $25.00 you pay—go to make up a portion of the income of the American Medical Association. The approximate balance sheet of that organization shows:

ASSETS	
Association Dues	$3,420,000.00
Subscriptions to Journals	1,710,000.00
Journal Advertising	2,700,000.00
Investments and Misc. Income	1,170,000.00
	$9,000,000.00
LIABILITIES	
Scientific Programs	$4,860,000.00
Socio-economic Activities	450,000.00
Public Relations	2,070,000.00
Advertising Cost	630,000.00
State Journal Advertising	720,000.00
Legislative Activities	270,000.00
	$9,000,000.00

That places the "huge political lobby" and its cost way at the bottom of a long list of activities, the most important of which is outlined in Article A of the Constitution: "The objects of the Association are to promote the science and art of medicine, and the betterment of public health."

MEDICAL BOOKS AND EQUIPMENT FOR KOREA

How about your surplus textbooks and medical journals—or even obsolescent equipment? Now is the time for "fall housecleaning" at your office, and those things you cannot use might be helpful to Korean physicians struggling to provide medical care in a country ravaged by war.

Shipments of books and equipment may be sent express collect to: KORMED, Alameda Medical Depot, 2155 Webster St., Alameda, Calif.

A resolution honoring Korean doctors of medicine and pledging the assistance of American medicine was adopted by the AMA House of Delegates at its June, 1953, New York Annual Session.

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(Continued from Page 988)

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VACUUM PHENOMENON IN THE LUMBOSACRAL DISC

(Continued from Page 996)

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7220 Gratiot Avenue

Mrs. William Mackersie

President, MSMS Woman's Auxiliary 1952-53

A very busy lady who, in spite of her many responsibilities, finds time for her favorite hobbies —figure skating and early American dancing. That's the charming and alert Mrs. William Mackersie, retiring President of the Woman's Auxiliary to the Michigan State Medical Society.

The figure skating dates back to her girlhood in Ontario, where it's rumored that the children skate before they walk.



Born in Belwood, Ontario, and reared in a Presbyterian Manse, Kathleen Mackersie had ambitions to become a businesswoman. She launched into a career with the Finance Department of the Canadian Government in Ottawa. After two years, she became associated with the Burroughs Adding Machine Company as a bookkeeping specialist.

Her business career—which took her from Ottawa to Vancouver to Toronto—came to an end when a young pharmacologist appeared on the scene. In 1924, she married William Mackersie, M.D., who taught at universities in Toronto and Winnipeg before joining the faculty of what is now Wayne University College of Medicine in 1927. Dr. Mackersie is now a practicing anesthesiologist in Detroit.

Then came the busy years of rearing two children. Her daughter Joan, a graduate of Detroit's Miss Newman's School and Stephens College of Columbia, Missouri, is now Mrs. Paul Dow of Grants Pass, Oregon, and herself the mother of two children. Son Peter Mackersie completed his schooling at Cranbrook School, at Bloomfield Hills, and the University of Michigan School of Business Administration before entering the Army more than a year ago. He is now stationed at Fort Bliss, Texas.

Mrs. Mackersie's civic and organizational interests are diverse and time-consuming. Within the past year, in addition to her outstanding work as President of the Auxiliary, the gracious lady has served as President of the Detroit Parliamentary Law Club, Secretary of the Detroit Association of Parliamentarians, Chairman of the Revision Committee of the Woman's Auxiliary to the Wayne County Medical Society, and Chairman of the Department of Social Welfare for the Michigan State Federation of Women's Clubs.

Beyond this, she is a member of the Detroit Women's Committee for the March of Dimes, a trustee of the Michigan Health Council, and active in the National Association of Parliamentarians and the Advisory Committee to the Michigan Study of Nursing Needs and Resources.

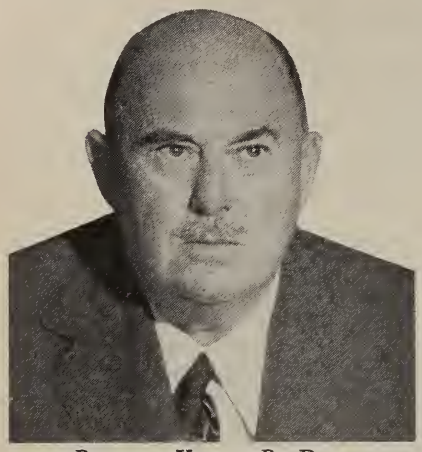
To cap it off, Mrs. Mackersie has just taken over the chairmanship of Civil Defense activities for the AMA Woman's Auxiliary, and elsewhere in THE JOURNAL is a brief report on her work in helping establish an Auxiliary to the Ontario Medical Association.

All this and figure skating, too.

Throughout most of the year, Mrs. Mackersie can be found enjoying life at her Detroit home, 18205 Roselawn Avenue, but when the summer sun shines on the eastern shore of Lake Huron it's time to relax—as often as possible—at the Mackersie cottage at Bruce Beach, Kincardine, Ontario, storing up energy for the busy months ahead.

In the lake breezes, she even finds a little time to channel her creative ability into another outlet, knitting. Not the ordinary knit-and-purl variety, however; original designs requiring concentration and dexterity are her forte.

To Kathleen Mackersie at the close of a successful year, especially as Woman's Auxiliary President, THE JOURNAL expresses its thanks and best wishes for the future!



PAUL DE KRUIF, PH.D.

de Kruif Admits Mistake in Supporting Kaiser-Permanente Health Plan

The following letter to Paul D. Foster, M.D., President of the Los Angeles County Medical Society, is reprinted from the *Los Angeles County Medical Bulletin* by special permission of the Los Angeles County Medical Society and through the courtesy of the writer, Paul de Kruif, Ph.D., of Holland, Michigan, Roving Editor of *Reader's Digest*.

It is de Kruif's conviction that the general adoption of closed panel medicine like the Permanente Health Plan would mean socialized medicine. Even though it would be private socialism, it would be fully as obnoxious as government socialism.

The medical profession has so far successfully fought the threat of government medical socialism. The letter here reprinted is Paul de Kruif's experience with *private* socialism in medicine. Of how he was at first fooled by it. And how he de-fooled himself.

THIS is a confession of personal error and a statement of what the present writer has learned as a result of that mistake.

From 1943 through 1949, in magazine articles and books, this writer described the Kaiser-Permanente health plan with enthusiasm. He believed that, if generally adopted, the plan would bring medical care to the American people at a cost within the reach of the great majority.

Events since 1949 have convinced this writer that the Kaiser-Permanente health plan is *not* a model for a method of bringing good medical care to the country.

Here, briefly, is the story of this writer's disillusionment. In 1943, observing the beginning of the plan's operation, he understood that the profits of closed panel, prepaid group practice would be used for the following purposes: To amortize the cost of the Oakland Permanente hospital, built on loans; to build new hospitals; and to support medical research.

The first two objectives have succeeded, brilliantly. The last, that is, the development of medical research, has not been attained. And without active medical research to keep medical care up-to-date and to advance it as it now is progressing revolutionarily—without medical science animating medical care, the finest hospital is only the simulacrum of a whited sepulchre.

In 1943, the present writer was assured by the principals of the Kaiser-Permanente organization of their eagerness to co-operate with the medical profession as a whole. This writer pointed out to Mr. Henry J. Kaiser and Dr. Sidney R. Garfield that the medical staff of their organization could not progress without intimate, cordial and constant contact with organized medicine—namely, with the entire medical profession outside the Kaiser-Permanente organization.

. . . A Sad Story

This was what the Kaiser-Permanente authorities said they wanted. And so, to test their intent, the present writer was instrumental, again and again, in bringing together top level representatives of Kaiser-Permanente with top level representatives of organized medicine, county, state and national. The record of these conferences is a sad story of misunderstanding and failure. Of course it takes two sides to make a fight. Yet, the present writer with regret must report, that a certain atmosphere pervaded these conferences, as follows—

The representatives of organized medicine asked one change in Kaiser-Permanente's procedure as a condition essential to organized medicine' co-operation. Namely, that the closed panel be changed to open panel; that subscribers to the Permanente plan, if they wished the services of physicians or surgeons other than the full-time medical employes of Kaiser-Permanente, could have that service and be indemnified for it. This to the present writer seems reasonable, for if Permanente's medical care is truly outstanding, then few subscribers will ask for non-Permanente doctors; and the plan will therefore not suffer economically.

Against this proposal by organized medicine's representatives, Kaiser-Permanente's officials have been obdurate. Again and again, Kaiser-Permanente's principals assure this writer that the medical profession as a whole hated and feared Kaiser-Permanente, that Kaiser-Permanente was persecuted by organized medicine. A curious and contradictory dichotomy, seems, to the present writer, to pervade the thinking of the Kaiser-Permanente authorities—

On the one hand, they say organized medicine has nothing to fear from the growth of Kaiser-Permanente, indeed, that Kaiser-Permanente's ex-

istence will make the private practice of medicine more prosperous. On the other hand they believe that the private practice of medicine as we know it is outmoded and will soon be a thing of the past.

If the present writer had been less stupid, he would have seen the futility of trying to bring Kaiser-Permanente and the medical profession together. This writer should have taken warning, long ago, from Dr. Sidney R. Garfield's point of view regarding the relationship between patients and their doctors.

According to Dr. Garfield, this human relationship is no longer necessary. According to Dr. Garfield, teamwork by specialists streamlined under a hospital roof has made the doctor patient relationship obsolete. To this writer Dr. Garfield illustrated that by examples—

Where does the doctor-patient relationship come in when a radiologist examines your chest by fluoroscope in the dark? What's the need of doctor-patient relationship for a rectal surgeon who proctoscopes you and operates on you, strictly from behind?

To the present writer this point of view seemed a bit premature. Has medicine really become so scientific that cold technique can completely replace warm human understanding, that medical robots can replace medicine's human practitioners, just as guided missiles promise to make human jet and bomber pilots things of the past?

An Anachronism

This production-line point of view of the Director of Kaiser-Permanente became more and more disturbing to the present writer as he took up the study of the Alameda plan. The personal physician, the new man of medicine, emerging in California, is a medical advance fully as important as the new antibiotics, vitamins and hormones. Indeed, the chemical revolution has put a new mighty power into the hands of general practitioners. They can understand and love their patients as of old and at the same time treat them more skillfully than could the greatest specialisst in many fields, ten years ago. Kaiser-Permanente medicine is an anachronism, built rigidly as it is around specialist teamwork, in some specialties already in their twilight.

In the Kaiser-Permanente health plan there is no room or function for the personal physician, the new man of medicine. The personal physician must be his own man, must be free. What is more, from the personal experience of the present writer (who here refrains from personalities), at Kaiser-Permanente there is no thorough appreciation of the fantastic power of the new chemical medicine.

As citizens, as sick and suffering people, what do we want from our doctors? We want much more than prepaid medicine at a few cents a day and more than an air-conditioned room in a hospital that is an interior decorator's dream. *We want love from our doctors—plus knowledge of how to use what's new in science.*

The Old Dream

The present writer's enthusiasm for Sidney Garfield's original dream of a Mayo Clinic for the common man, died hard. It was remarkable how Sid could build hospitals and pay them off. But what had become of his old dream of research?

Two years ago, after efforts for peace between Kaiser-Permanente and the CMA had stymied, this writer made a last try. He came to California with a plan. Did Mr. Kaiser and Dr. Garfield want medical research to be an integral part of the growth of Permanente? Did they really want Kaiser-Permanente to co-operate with organized medicine as now privately practiced? They said they did.

On the other hand, did the leaders of the CMA want to kill Kaiser-Permanente? They said they did not.

Relying on the good faith of both parties, this writer presented his little plan to Kaiser-Permanente principals. The plan was simple. It involved just one element, a human being, a man of such integrity, wisdom and high standing that he would serve ideally as an arbiter and co-ordinator.

World-famed

The name proposed is that of a man scientifically famous not only in California, not only nationally, but world-famed. California's men of medical science look up to him as their master. California's physicians know him and respect him. The state's leading citizens value his rugged honesty and are proud of his achievements, vital to California's industry as well as its health.

What has been this man's attitude toward the Kaiser-Permanente health plan? When it was unpopular to do so, he went on public record regarding its services in medical care, and its then promise for the future. And his attitude toward organized medicine? While unsparingly critical at times, it was an attitude of cooperation and friendliness.

Many leaders of California's organized medicine were approached regarding the suitability of this great man of medical science and public health as an arbiter of the difficulties between Kaiser-Permanente and organized medicine. With the exception of one physician—who was skeptical that even this man could bring the unfortunate war to a peaceful end—all other medical leaders were enthusiastic for the plan.

The candidate himself was cordial to the plan, provided he would be given a free hand. What were his activities to be? He would serve as Director of Kaiser-Permanente research, and as

(Continued on Page 1020)

Michigan's Department of Health

Albert E. Heustis, M.D., Commissioner

NEW HDA SIGNS POPULAR

The first order of 1500 of the new green and gold HDA, Health Department Approved, signs for the guidance of Michigan highway travelers in choosing a place to stay was quickly exhausted and an additional 2,000 was needed to supply the demand.

The HDA sign posting program is a cooperative undertaking of the Michigan Department of Health and the state's full-time local health departments which serve all but 13 of the counties. The sanitation and safety standards which are the criterion for awarding the sign to a resort operator were drawn up by the State Department in consultation with the local health department sanitarians. The sign itself is the property of the Michigan Department of Health and the formal agreement signed by the resort operator is with the department.

Issuing of the signs is a responsibility of the local health department as is inspection of the resorts. Upon approving the resort, the local sanitarian secures the signature of the resort operator on a form in which he agrees to maintain his establishment in conformity with the standards or, on failure to do this, to relinquish the sign. As a precaution against transfer, the number on the agreement form is stamped on a metal tag affixed to the HDA sign. The local health department transmits the signed agreement to the Michigan Department of Health where a master file of approved resorts is kept.

The resort operator also receives an 8 x 10 placard for posting on his premises to inform guests of the protection assured by the sign. These placards have been used extensively by Chambers of Commerce and tourist information bureaus in the state.

MARQUETTE COUNTY HAS MASS INOCULATION WITH GAMMA GLOBULIN

The mass inoculation of children from one through nine in Marquette County on July 22 to 24, which the newspapers called "Operation Lollipop", was an outstanding example of community co-operation, spearheaded by the Marquette County Medical Society. From the moment that cases in the county reached the level which qualified the area for gamma globulin for mass inoculation, the president and secretary of the county medical society gave leadership to the local project.

Notification to proceed with community arrangements was phoned to the secretary just before noon on July 18. By evening of July 21 an organization of 34 physicians, 100 registered nurses and approximately 1,000 volunteers from the community were organized, instructed and ready to go. The injection centers, one at the high school in Marquette and the other in the high school in Ishpeming, were both registering children at 8:00 o'clock on July 22. At 6 o'clock on July 24, the last injection was given, to child number 9,203. Injections averaged 6.6 cc.

TOPICAL FLUORIDE PROGRAM PROGRESSING SATISFACTORILY

The department's summer program of topical application of fluoride to the teeth of approximately 16,500 Michigan children in some 116 locations in 27 counties is keeping well up to schedule. Supervision is being given by local dentists with the co-operation of health departments and parent groups, and 37 students from the University of Michigan, 15 junior dentists and 22 dental hygienists, are doing the application.

MONROE COUNTY HEALTH DIRECTOR APPOINTED

C. D. Barrett, M.D., became director of the Monroe County Health Department on September 1. Dr. Barrett is well known in Michigan both for his service on the staff of the Michigan Department of Health and as director of the Lansing-Ingham County Health Department.

NEW HEARING CONSULTANT FOR NORTHERN MICHIGAN

Mr. Nestor A. Wickman joined the staff of the department on June 29 as Regional Hearing Consultant for the northern part of the state. He succeeds Mrs. Florence Poorman who resigned to take graduate work. Mr. Wickman's services are available for community hearing conservation programs through the local health departments and the Section of Maternal and Child Health as a part of the department's statewide hearing conservation program for Michigan school children.

COURSE IN VENEREAL DISEASE CONTROL

The Public Health Service has announced that the postgraduate courses in venereal disease control formerly given at the Hot Springs Medical Center are being continued at Chapel Hill, North Carolina, under the joint auspices of the University of North Carolina School of Medicine, the University of North Carolina School of Public Health and the U. S. Public Health Service. The twenty-first course will be given at the University of North Carolina from September 28 through October 2, 1953. The course is designed to acquaint physicians with latest developments in the fields of clinical venereal disease and in the public health aspects related to control. A schedule of the course is available from the Division of Tuberculosis and Venereal Disease Control, Michigan Department of Health.

There is no tuition for the course but students are expected to provide their own transportation and room and board. Requests for housing accommodations should be addressed to Harold J. Magnuson, M.D., Director, V. D. Experimental Laboratory, P.O. Box 1049, Chapel Hill, North Carolina.



The inevitable restrictions of advancing years, the reduced activity and a lowered intake of bulk-producing foods all contribute to the high incidence of constipation in older persons.

CONSTIPATION IN THE AGED

Constipation is almost a universal complaint of geriatric patients

Frequently, too, the protracted use of cathartics has left the colon in an atonic state and it is no longer capable of effecting a normal evacuation.

Metamucil has long been recommended for the treatment of constipation in the elderly. A highly refined vegetable product which is free from irritants, Metamucil effects a natural mechanical stimulus in the colon which helps the dysfunctioning muscles to regain and maintain their normal tone.

Metamucil may be safely prescribed for prolonged use without fear of dependence, intestinal irritations or allergic reactions.

Metamucil® is the highly refined mucilloid of Plantago ovata (50%), a seed of the psyllium group, combined with dextrose (50%) as a dispersing agent. It is accepted by the Council on Pharmacy and Chemistry of the American Medical Association.

SEARLE *Research in the Service of Medicine*



THE G. A. INGRAM COMPANY
4444 Woodward Avenue, Detroit 1, Michigan

Legal Opinions

L. Fernald Foster, M.D., Secretary,
Michigan State Medical Society,
Lansing 15, Michigan.

Dear Doctor Foster:

You have referred to me for opinion an inquiry by a member of the Michigan State Medical Society:

"Are there any legal aspects that would prevent a hospital from" requiring a loyalty oath to be given by members of its medical staff?

The governing board of a hospital may adopt all reasonable by-laws, rules and regulations for the proper conduct of a hospital and of its employes and medical staff. In public hospitals, such as municipal, county, state and federal institutions, the by-laws must also not exceed the powers granted to the applicable statutes and laws affecting such institutions.

Unfortunately, the inquiry did not state whether the hospital in question is a voluntary hospital or a public one. Nor do we have before us the proposed form of "loyalty oath". It is my opinion that the medical staff, as such, could not lawfully impose such a requirement, but that the by-laws and rules of the hospital itself, adopted by its governing board, would have to make such a provision.

In the second place, any oath required to be taken should be uniformly required of all employes and staff members rather than merely the staff members.

In the third place, should such oath be required by the amendment of by-laws, it is doubtful whether a staff member already holding privileges could be properly dismissed from the staff for his failure to sign such an oath before the expiration of the term of his appointment.

In the fourth place, the terms of the oath itself must not be unreasonable within the contemplation of the law. In this connection, it may be of interest to note the form of oath required by statute of teachers in this state:

"I do solemnly swear (or affirm) that I will support the constitution of the United States of America and the constitution of the State of Michigan, and that I will faithfully discharge the duties of teacher, according to the best of my ability."

Generally speaking, "loyalty oaths" have been the subject of considerable controversy in various parts of the United States. The University of California and its Board of Regents were named as defendants in a suit brought by certain teachers in that University who refused to subscribe a so-called loyalty oath. The Supreme Court of California held that they were not obliged to subscribe to the oath. There are other places where the question has given rise to a great amount of conflict and litigation, depending on the form of the oath itself.

Unless the particular oath contemplated by the inquiry can be clearly shown to be reasonable, and one which

bears a proper relationship to the function of staff members, and is regularly adopted by the governing board, that is to say, the trustees of the hospital, it is my opinion that it may cause considerable legal difficulties, particularly if a present member of the staff refuses to subscribe to it.

The only hospitals in which members of the staff are required to take an oath, as far as I can ascertain, are those in which teachers, instructors or professors of educational institutions supported in whole or in part by public funds, are members of the staff. Such persons are required by statute to subscribe to the following oath:

"I do solemnly swear (or affirm) that I will support the constitution of the United States of America and the constitution of the State of Michigan, and that I will faithfully discharge the duties of my position, according to the best of my ability.

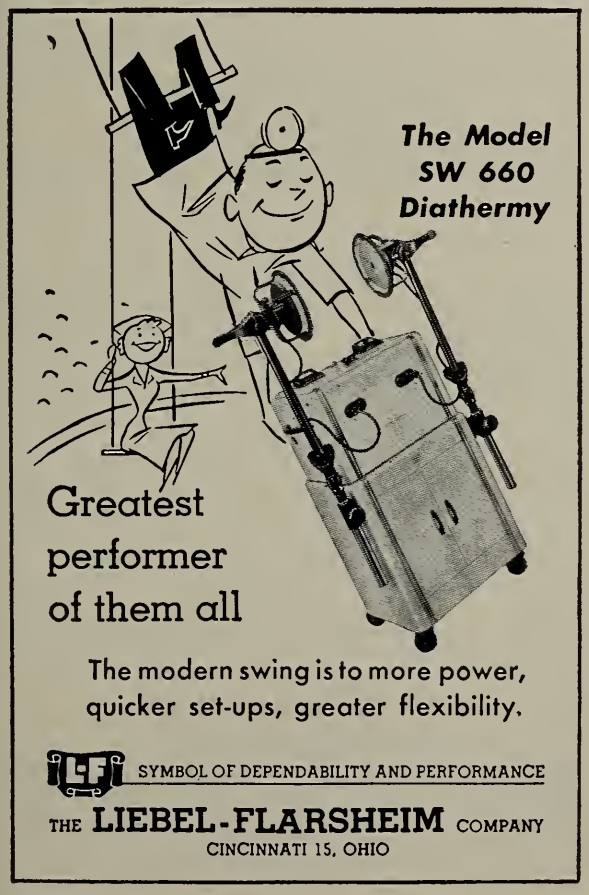
(Act 23, P.A. 1935, as amended)

These staff members are required to take the oath merely because they teach and not because they happen to be staff members of a hospital.

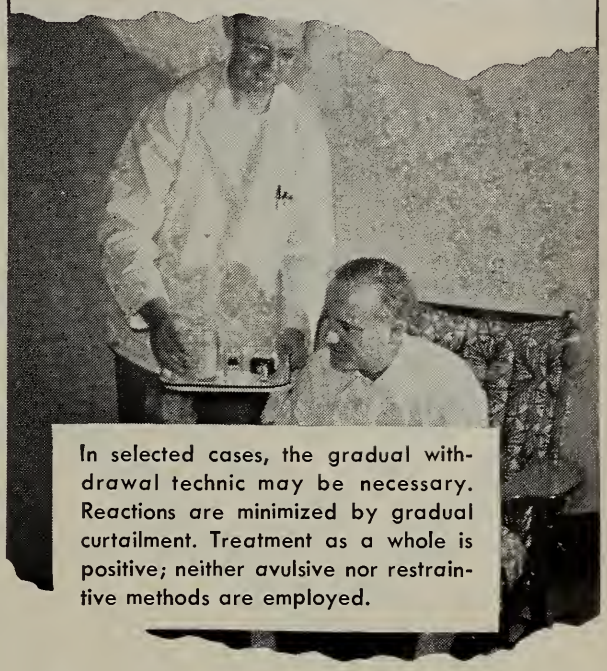
Very truly yours,

J. Joseph Herbert
Legal Counsel,
Michigan State Medical Society

June 22, 1953.



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Communications

Michigan Medical Journal
Lansing, Michigan.

Dear Sir:

The following paragraph is a portion of our contract with the Veterans Administration for the purpose of furnishing prescriptions and medical requisites to beneficiaries of the Veterans Administration.

"USP and NF PRODUCTS: The Contractor, without cost to the Veterans Administration, will from time to time, and by appropriate means, advise the Michigan State Medical and Dental Societies of the availability of USP and NF Products in an effort to establish prescribing practice which will permit the dispensing of the highest quality drugs for beneficiaries of the Veterans Administration at the lowest possible cost to the Veterans Administration."

Pursuant to these instructions, we furnish the attached list of USP and NF Products. Will you publish these together with appropriate notations in an early edition of your State Journal. We appreciate your courtesy to us in the past and thank you for allowing us to present this letter and its message to you at this time.

Cordially,

JOHN H. BUTTS
Executive Secretary
Michigan State Pharmaceutical Assn.
June 10. 1953

From the National Formulary

Chloroform Liniment
Linimentum Chloroformi

Chloroform Liniment contains in each 100 cc., not less than 27 cc. and not more than 30.5 cc. of $CHCl_3$.

Iodine Ointment
Unguentum Iodi

Caution: During its manufacture and storage this Ointment must not come in contact with metallic utensils or containers.

Iodine Ointment contains the equivalent of not less than 6.5 per cent and not more than 7.5 per cent of I.

Red Mercuric Oxide Ointment
Unguentum Hydrargyri Oxidi Rubri

Red Mercuric Oxide Ointment contains not less than 9.5 per cent and not more than 10.5 per cent of HgO.

From the United States Pharmacopeia

Sulfur Ointment
Unguentum Sulfuris

Sulfur Ointment contains not less than 9.5 per cent and not more than 10.5 per cent of S.

Medicinal Soft Soap
Sapo Mollis Medicinalis
Soft Soap, Green Soap

Medicinal Soft Soap is a potassium soap made by the saponification of vegetable oils, excluding coconut oil and palm kernel oil, without the removal of glycerin.

Rose Water Ointment
Unguentum Aquae Rosae

Cleveland, Ohio.

Mr. Wiiliam J. Burns, Executive Director,
Michigan State Medical Society
Lansing, Michigan
Dear Mr. Burns:

I wish to commend your Society on your efforts in the creation of the William Beaumont Museum at Mackinac Island. It is certainly unique and also very good medical public relations to have an institution at such a popular site.

Your committee, I am sure, is arranging the exhibits primarily for lay visitors and not medical ones. Many people are a bit leery of doctors because they are supposed to "experiment" on people. Certainly old St. Martin suffered no ill effects if judged by his longevity and progeny.

Please send me any pamphlets or literature relative to the dedication as we may wish to use it in our Academy BULLETIN, with your approval.

Sincerely yours,
D. K. Spitler, M.D.
Editor of The Bulletin
of the Cleveland Academy of Medicine

July 31, 1953

* * *

Atlanta, Georgia

Editor Wilfrid Haughey, M.D.
610 Post Building
Battle Creek, Michigan
Dear Dr. Haughey:

The Editor of the *Journal of the Medical Association of Georgia* would like to ask you if it would be possible for you to send us a few copies of your Journal issue which carried the "Beaumont" material. We are in the process of setting up a similar memorial issue and feel that your Journal can best serve as our guide.

It is my personal opinion that of the thirty-three state medical journals, yours tops them all, and we would be pleased if we could use the publication as a model. If there is any charge for these issues, please bill us accordingly.

My best wishes to you and your staff who turn out an extremely well-done and interesting publication.

Cordially yours,
Milton D. Krueger
Director of Publications
Medical Association of Georgia

July 23, 1953

* * *

R. J. Hubbell, M.D., President
Michigan State Medical Society
Lansing 15, Michigan
Dear Doctor Hubbell:

At the Thirty-Fourth Annual Encampment of the Veterans of Foreign Wars of the United States held in Port Huron, Michigan, June 18, 1953 the Department Welfare Committee at their regular session unanimously recognized the outstanding services of the Michigan Medical Association to sick and disabled veterans of the State of Michigan.

Joseph W. Mann, Department Service Officer, Department of Michigan, Veterans of Foreign Wars of the United States on numerous occasions has informed the membership of the Veterans of Foreign Wars of the United States of the Liaison Committee composed of members of the Michigan Medical Association and Service Organizations. The membership as a whole have observed with appreciation and gratitude the attitude of the Michigan Medical Association regarding adequate care for tubercular and mental ill veterans.

We are fully cognizant of the fact that the Michigan Medical Association has shown initiative and fortitude in setting up a Liaison Committee so that mutual problems may be discussed and full understanding be arrived at between veteran organizations and the Michigan Medical Association. It is our sincere opinion that such a Committee has done much in assisting the furtherance



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of health and happiness of not only veterans of the State of Michigan but the citizenry as well.

It is our sincere hope that the Michigan Medical Association will inform the participating doctors of the Association of the sincere gratitude of the Veterans of Foreign Wars of the United States for their unselfish efforts in building an organization in the State of Michigan that will react to the benefit of all parties concerned.

Sincerely yours,
ARTHUR GREIG, *Chairman of Welfare Committee, Department of Michigan, Veterans of Foreign Wars of the United States.*

July 9, 1953

* * *

Lansing, Michigan

Michigan Foundation for
Medical and Health Education, Inc.
Lansing, Michigan
Gentlemen:

Checks totalling one thousand dollars are enclosed to satisfy pledge to Student Loan Fund of the Michigan Foundation for Medical and Health Education, which pledge has been standing subject to call. As repeatedly announced, this has been held available for emergency, but I now wish to close the obligation.

Yours very truly,
E. I. CARR, M.D.

* * *

Kalamazoo, Michigan

Genesee County Medical Society
ATT: A. C. Pfeifer, M.D., President
E. P. Griffin, Jr., M.D., Secretary
Gentlemen:

The Council of the Michigan State Medical Society at its summer session of July 16-17-18, took cognizance of the excellent work of members of the Genesee County Medical Society on the occasion of the June 8 tornado that struck a portion of Flint and Genesee County.

I know you will be pleased to learn that The Council placed upon its minutes a motion commending the Genesee County Medical Society and expressing congratulations of the Michigan State Medical Society for the self-sacrificing work which the Genesee County medical profession performed during the days of June 8 and those immediately following the disaster.

Our hats are off to the members of the Genesee County Medical Society for a job well done under most trying circumstances.

Sincerely,
R. J. HUBBELL, M.D.,
President, MSMS.

August 6, 1953

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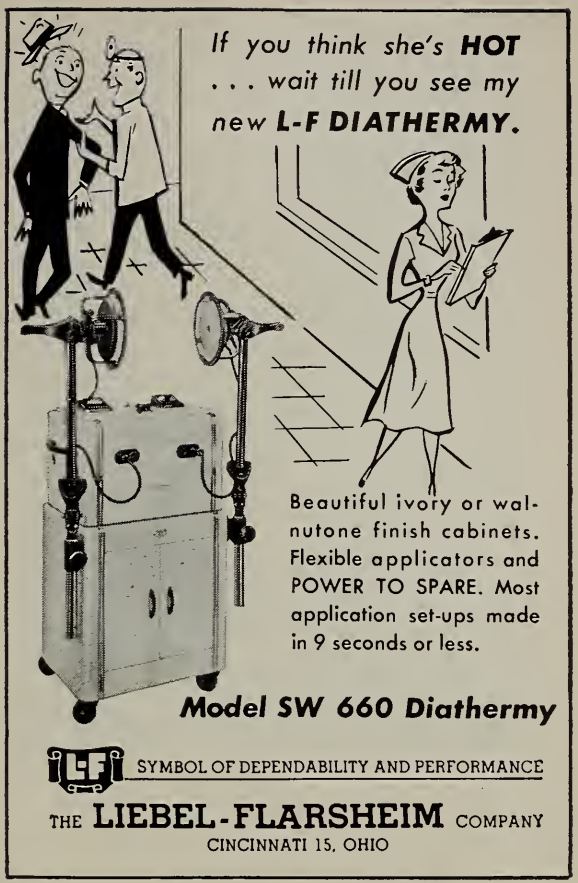
Woman's Auxiliary

WOMAN'S AUXILIARY TO MSMS ASSISTS ESTABLISHMENT OF ONTARIO WOMAN'S AUXILIARY

With the guidance and advice of Mrs. William Mackersie, Detroit, President of the Woman's Auxiliary to the Michigan State Medical Society, a Woman's Auxiliary to the Ontario Medical Association in the neighboring province of Canada has been formed.

While exploratory work was started five years ago, plans for organization have moved rapidly during the past year, following a visit of two Ontario women to the 1952 annual meeting of the MSMS Woman's Auxiliary held in Detroit. The Ontario visitors came to Detroit at the suggestion of the Board of Directors of the Ontario Medical Association which had approved the establishment of a woman's auxiliary.

The final preliminary step was taken in May, when Mrs. Mackersie addressed a dinner meeting of seventy-five doctors' wives in Toronto during the annual meeting of the Ontario Medical Association. Following her talk, a co-ordinating committee was formed with power to draw up a proposed constitution for an Ontario auxiliary, as well as a suggested constitution to be used as a guide for local branch auxiliaries.



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In Memoriam

CHARLES E. BOYS, M.D., former President of the Kalamazoo Academy of Medicine, died July 7, 1953, at Kalamazoo at the age of seventy-eight.

Dr. Boys had practiced in Kalamazoo for almost fifty years, specializing in surgery, gynecology, and obstetrics.

A native of Kansas, Dr. Boys came to Michigan in his childhood, attended Albion College, and was graduated from Northwestern University Medical School in 1903. He interned at Wesley Hospital, Chicago, then settled in Kalamazoo immediately thereafter.

Dr. Boys served with the state infantry in the Spanish-American War. He was very active in Kalamazoo civic and cultural affairs, and was a member of various civic organizations and professional societies. He served on The Council of the Michigan State Medical Society for ten years until 1935.

Dr. Boys is survived by his wife, Myrtle, and two sons, Dr. Floyd Boys, faculty member at the University of Illinois, and Dr. Richard Boys of the University of Michigan English Department faculty. A brother, Samuel E. Boys, owner and editor of the *Plymouth* (Indiana) *Pilot-News,* also survives.

EDWARD R. BREITENBECHER, M.D., of Highland Park, died July 5, 1953, at the age of seventy.

Born in Detroit, Dr. Breitenbecher studied at the Detroit College of Medicine, then interned at Harper Hospital. With the exception of seven years, from 1910 to 1917, when he practiced medicine in Richmond, Dr. Breitenbecher spent his life in the Detroit area.

He was a member of the Wayne County Medical Association, Phi Beta Phi, and a Life member of Zion Lodge No. 1, F and AM.

A widower, Dr. Breitenbecher had no survivors.

LIEUTENANT COLONEL CLARENCE R. BROWN, M.D., Chief of the Orthopedic Surgery Section at Percy Jones Army Hospital, Battle Creek, died July 5, 1953, at the age of forty-one.

He had been stationed at Percy Jones Hospital since January, 1951. Dr. Brown was commissioned in 1938 and during his career served as division surgeon of the 94th Infantry Division, and as executive officer and commanding officer of various general and field hospitals. Before coming to Battle Creek, he had been on the staff of Walter Reed Army Hospital in Washington, D. C.

He was graduated from the University of Tennessee College of Medicine in 1937. He was a native of Mississippi.

Dr. Brown is survived by his wife, Eleanor; and three young daughters. His mother, brother, and two sisters, also survive.

DEAN W. HARRIS, M.D., of Fremont, died July 6, 1953, in Grand Rapids at the age of sixty.

Dr. Harris was Chief of Staff at Gerber Memorial

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*T.M.

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Hospital, Fremont, at the time of his death. He had practiced in Fremont since 1948.

Before moving to Fremont, he had practiced medicine in Detroit and Lansing. He was a graduate of the University of Cincinnati Medical School and did graduate work in orthopedics and surgery at the University of Michigan.

Dr. Harris was Past President of the Newaygo County Medical Society, a member of the American College of General Practitioners and Phi Rho Sigma.

For several years prior to 1948, he was on the surgical staff of Edward W. Sparrow Hospital, Lansing, and before that was on the staff of Grace Hospital, Detroit.

Dr. Harris is survived by his wife, Marion; two daughters, Mrs. Eugene Sharkoff of Aberdeen, Maryland, and Mrs. Walter Johnson of North Falmouth, Massachusetts, and two brothers, Glenn and George D., of Detroit. A sister, Mrs. Ben Wade Jenkins, of Detroit, also survives.

HENRY E. PERRY, M.D., pioneer Newberry physician and former president of the Michigan State Medical Society, died July 9, 1953, at the age of eighty-seven. Death came to Dr. Perry in Lakeland, Florida, where he was making his home with his daughter, Mrs. Arno Langford.

Dr. Perry came to Newberry in 1899 as Assistant Superintendent of the Newberry State Hospital. After four years with that hospital, he took a postgraduate course in medicine at Northwestern Medical School, Chicago, and returned to Newberry in 1905 to enter private practice. He continued in practice there until his retirement eleven years ago.

Dr. Perry served as President of the Michigan State Medical Society in 1936-37 and was one of the medical leaders active in sponsoring Basic Science legislation in 1937.

He had previously served as President of the Upper Peninsula Medical Society and as a member of The Council of the Michigan State Medical Society.

In 1932, Dr. Perry was elected to the State Legislature, serving one term in the House of Representatives, during the 57th Legislature, 1933-34.

Born in Ontario in 1865, he was a veteran of the Spanish-American War. He was graduated from the Michigan College of Medicine and Surgery in 1897.



HENRY E. PERRY, M.D.

Dr. Perry was co-sponsor of Newberry's first hospital in 1923.

Besides his daughter, he is survived by two grandsons who reside in Lakeland, Florida.

PERRY V. WAGLEY, M.D., superintendent of Pontiac State Hospital, died June 1, 1953, at the age of sixty-one.

Dr. Wagley, who was widely known for his achievements in mental health, was graduated from the University of Arkansas School of Medicine in 1915. He had been superintendent of the Pontiac institution for the past twenty years.

He is survived by his wife, Alma; a daughter, Mrs. Elaine von Grimmenstein; a grandson, Geoffrey; two brothers and two sisters.

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. . . . . NEWS MEDICAL

Michigan Authors

John E. Summers, M.D., of Lansing, is the author of an article, "Fat Embolism Associated with Multiple Fractures," published in *The West Virginia Medical Journal,* July, 1953.

F. W. Hartman, M.D. and **V. G. Behrmann, Ph.D.,** of Detroit, are the authors of an article, "The Present Status of Plasma Expanders," published in *The Journal of the American Medical Association,* July 18, 1953.

Leland F. Carter, M.D., of Detroit, is the author of an article, "Progressive Senile Fibrillar Atrophy of the Iris Stroma" published in the *American Journal of Ophthalmology,* July, 1953.

R. L. Kahn, D.Sc., of Ann Arbor, is the author of an article, "Clarification of Syphilitic and Nonsyphilitic Serodiagnostic Reactions," published in *The Journal of the American Medical Association,* July 25, 1953.

Harold F. Falls, M.D., of Ann Arbor, is the author of an article, "Albinism," published in *Transactions, American Academy of Ophthalmology and Otolaryngology,* May-June, 1953.

A. D. Ruedemann, M.D., of Detroit, is the author of an article "Allergy of the Cornea and Bulbar Conjunctiva," published in *Transactions, American Academy of Ophthalmology and Otolaryngology,* May-June, 1953.

J. Lapides, M.D., of Ann Arbor, is the author of an article, "Fluid and Electrolyte Disturbances in Prostatism," published in *The Journal of the American Medical Association,* August 1, 1953.

John M. Hammer, M.D.; Frank Visscher, Ph.D., of Kalamazoo, and **Edward J. Hill, M.D.,** of Detroit, are the authors of an article, "Experimental Gastrojejunal Ulcers Produced by Reversing the Duodenum," published in the *Archives of Surgery,* July, 1953.

Harry C. Saltzstein, M.D.; Murray S. Mahlin, M.D., and **Schayel R. Scheinberg, M.D.,** of Detroit, are the authors of an article, "Bleeding Peptic Ulcers," published in *Archives of Surgery,* July, 1953.

* * *

The Eighteenth Annual Congress of International College of Surgeons will be held at The Waldorf-Astoria Hotel in New York, N. Y., September 13 thru 17, 1953.

A. H. Whittacker, M.D., of Detroit, is chairman of the Program Committee, Occupational Surgery Section.

Wallace H. Steffenson, M.D., of Grand Rapids, will present a paper on "Early Management of Traumatic Wounds."

William Fulton, M.D., of Detroit, will present a paper on "The Principles of Industrial Medical Department Layout with Special Reference to Surgery."

The Institute of Industrial Health and School of Public Health at Ann Arbor is sponsoring a series of television programs to continue throughout the year at intervals of four to six weeks. They will appear on WJBK-TV-Chanel 2 of Detroit. The Institute of Industrial Health and School of Public Health now has printed copies of the proceedings of the Fourth Discussional on Industrial Health Programs conducted in December, 1952, in Ann Arbor, on the subject, "The Worker as a Member of the Industrial Health Team."

* * *

Results of the first six months of the continuing survey of physicians separated from active military service have been announced by the AMA's Council on National Emergency Medical Service. As of July 15, 1953, a total of 4,940 questionnaires were sent out and approximately 3,270—or 66 per cent—were returned.

Several interesting points were brought out in the survey: average total time spent in service by those responding—23 months; average tour of duty in the U. S.—15.6 months; average tour of foreign duty—7.4 months; average time spent in active service, exclusive of time spent in an Army or Navy specialized training program—15.7 months; the majority felt they were properly assigned and rotated; willingness to remain in service for more than two years was indicated by 636 physicians. . . . One question, designed to obtain suggestions on how medical societies may be of greater service to doctors in service, was answered by only 50 per cent of the respondents. The most frequently made suggestions were-request for more information, personal visits by civilian physicians to evaluate grievances, invite physicians in service to civilian medical meetings, assist in preventing evasion of military service, provide specialists for clinical conferences. With regard to over-all staffing conditions—576 (23 per cent) indicated that they were over-staffed; 616 (25 per cent) under-staffed and 1,304 (52 per cent) adequately staffed. Comparatively few offered additional remarks—53 seemed dissatisfied with military service; 171 seemed satisfied with their tour of duty.

Copies of the survey report may be obtained from the Council on National Emergency Medical Service.—*AMA News Notes.*

EDITOR'S NOTE:—Calhoun County Medical Society, seat of Percy Jones General Hospital, from the start of World War II invited all doctors in the military service to its meetings and provided special programs, but the interest was very discourageing.

* * *

A sharp increase in infectious hepatitis is reported the first six months of this year compared with the same period in 1952, and a sharp decrease in measles. In



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the same period significant decrease was noted in malaria among civilians, and a decrease of almost 90% among military personnel. About 25 per cent more acute poliomyelitis cases were reported. The compilation was announced by National Office of Vital Statistics.

Qualified investigators may now get limited supplies of radioactive cortisone and hydrocortisone from the Division of Research Grants, National Institutes of Health, Bethesda 14, Md.

* * *

Multiple Screening Services.—Bringing together all available information on multiple screening techniques throughout the country was the object of a study recently completed by the AMA's Council on Medical Service. This technique involves the use of two or more simple laboratory tests, examinations or procedures, applied rapidly and on a mass basis, to determine *presumptive* evidence of unrecognized or incipient disease or defect. In the AMA's study, data has been compiled on some 25 multiple screening surveys ranging from small county and industrial plant projects to city-wide and state-wide programs. Data also has been gathered on some of the single case-finding programs such as mass tuberculosis surveys, diabetes, cancer and heart disease detection clinics. The report includes comments and conclusions by those directly connected with the surveys studied, plus other pertinent information such as advantages and disadvantages and ultimate goals of these programs. Copies of the full report will be distributed to all state medical societies. Additional copies will be available as long as the limited supply lasts. A complete bibliography on this subject may be obtained from the Council. —*AMA News Notes.*

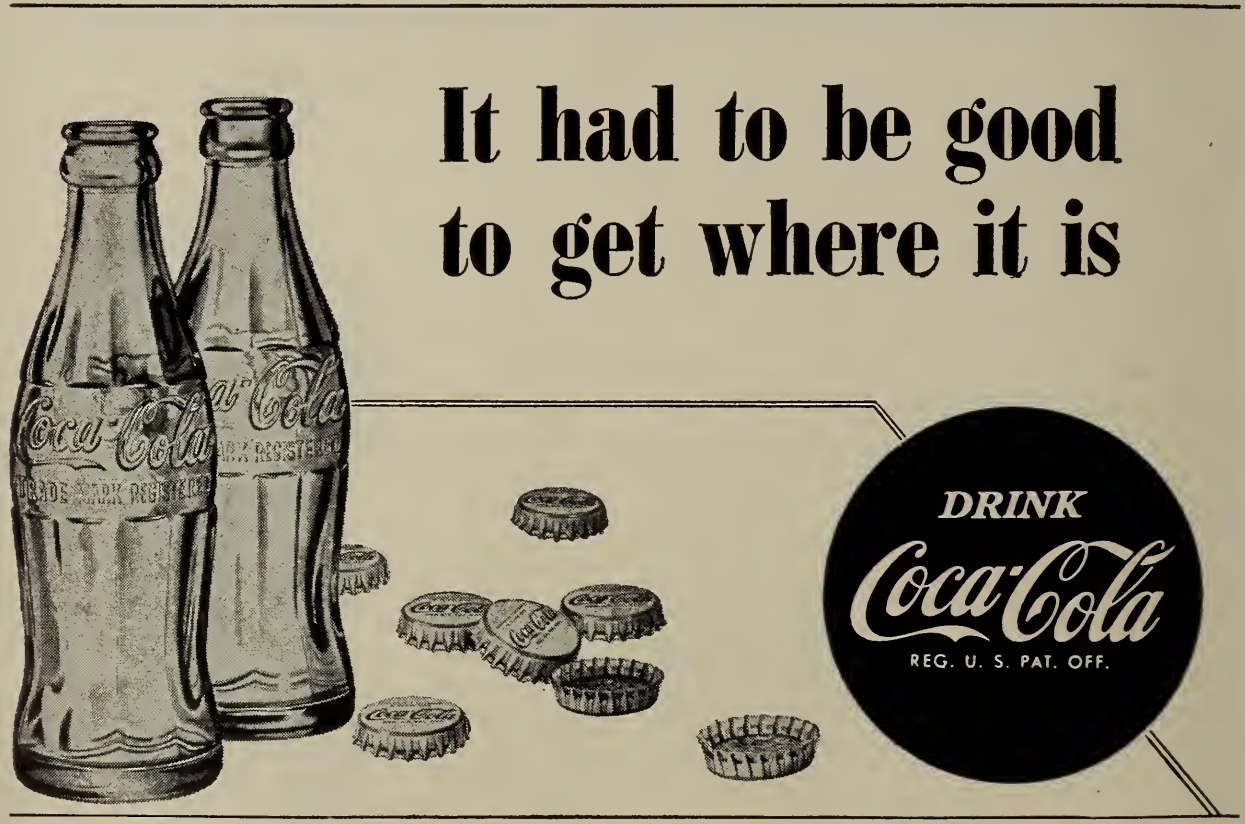
* * *

The Trudeau Society is making a special effort to have a large attendance of physicians at its Mississippi Valley Conference, to be held in Minneapolis, Minn. October 15, 16, 17, 1953. Leading authorities on tuberculosis from this country and abroad will appear on the program. There are fourteen listed papers by seventeen well known authors and a guest round table proposed. The Trudeau Society is the medical section of the National Tuberculosis Association. The meetings will be at the Hotel Nicollet. For further information, address Margaret Breen, Publicity Chairman, 614 Portland Avenue, Saint Paul 2, Minnesota.

* * *

The Detroit Industrial Physicians' Club, in co-operation with the Faculty of Wayne University College of Medicine, recently presented its second series of Seminars in Industrial Medicine for undergraduate students. Two of the Seminars were held at the College of Medicine and two on Company premises. Whereas in 1952, attendance was restricted to members of the senior class, this year Dean Gordon Scott felt that the interest among the students was such that the program should be open to all classes. Attendance was high with considerable evidence of keen interest.

Members of the Faculty were most co-operative, both in participating in the program and in promoting interest among the students. At least one Professor actually



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sacrificed part of his own assigned time in order that students could attend the Seminar.

At both Michigan Bell Telephone Company and Chevrolet Gear and Axle Division of General Motors, the plant management went all out to provide an interesting tour, a delicious meal and an interesting discussion. Dr. Henry S. Brown acted as host at Michigan Bell and Dr. John Ganschow at Chevrolet Gear and Axle. Dean Scott was enthusiastic in his appraisal of the results of the Seminars. It is his hope that in the next year a more extensive teaching program in this field can be developed at the College of Medicine.

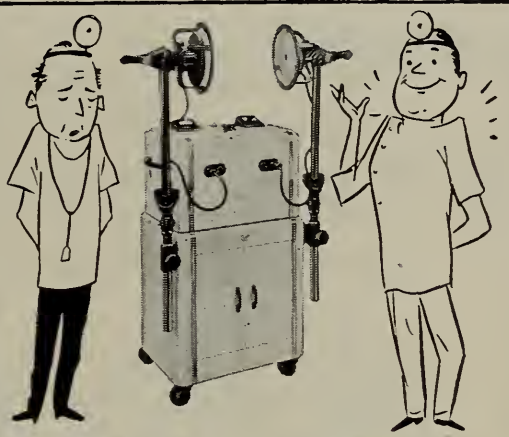
* * *

Prize Essay on Cardiac Surgery.—The Trustees of one of America's oldest medical essay competitions, the Caleb Fiske Prize of the Rhode Island Medical Society, announce as the subject for this year's prize dissertation "Recent Advances in Cardiac Surgery". The dissertation must be typewritten, double spaced, and should not exceed 10,000 words. A cash prize of $250 is offered.

For complete information regarding the regulations write to the Secretary, Caleb Fiske Fund, Rhode Island Medical Society, 106 Francis Street, Providence 3, R. I.

* * *

Frank M. Rhatigan, Brooklyn, New York, has been appointed Secretary of the American Surgical Trade Association, with headquarters in Chicago. Mr. Rhatigan has spent twenty-five years in the field of medical and surgical supplies. As Sales Promotion and Convention Manager of Davis & Geck, Inc., Frank has become known to hundreds of M.D.'s in Michigan. Mr. Rhati-



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gan served as one of the Founders as well as longtime Secretary and later President of the Medical Exhibitors Association.

Congratulations, Frank Rhatigan!

* * *

The American Institute of Dental Medicine will hold its 10th Annual Meeting in Palm Springs, California, on October 25 through October 29, 1953. A. C. Curtis, M.D., Ann Arbor, will speak on "The Physiology of Pigmentation in Man; Cutaneous Virus Diseases; The Dentist looks at the Field of Dermatology."

* * *

The Association of American Physicians and Surgeons has announced its annual national essay contest for high school students on the subject "Why the Private Practice of Medicine Furnishes this Country with the Finest Medical Care." The AAPS will award six national prizes with certificates of "Meritorious Achievement" to all contestants whose essays reach the national finals. For further information write Mal Rumph, M.D., Chairman, AAPS Annual Essay Contest Committee, 360 North Michigan Ave., Chicago 1, Ill.

* * *

The State Bar of Michigan is planning a Medicolegal Institute at the Sheraton-Cadillac Hotel, Detroit, on December 10-11, 1953. Sponsored by the Michigan Law Institute, in co-operation with the Law-Science Institute of the University of Texas and the Michigan State Bar Committee on Medical Jurisprudence, the sessions are bound to be of inestimable help to medical practitioners. The two-day meeting will be the first "Interval Short Course" to be followed at approximate six-month periods by second and third "interval" courses. Registrants who attend all three sessions may qualify for the Law-Science Certificate. Advance registrations may be made by sending $25 to the Michigan Law Institute, c/o State Bar of Michigan, 412 Olds Tower, Lansing. An additional fee, not exceeding $3.00, may be set to cover the cost of mimeographed materials.

* * *

Chester S. Keefer, M.D., Boston, was recently appointed by Mrs. Oveta Culp Hobby as Special Assistant to the Department of Health, Education and Welfare for health and medical affairs.

Success, Dr. Keefer, in this important work!

* * *

E. L. Henderson, M.D., Louisville, Kentucky, Past President of the American Medical Association, died at his home after a year's illness on August 1, 1953. Dr. Henderson was one of the great medical leaders of the century, sacrificing thousands of hours of precious time from his own practice to carry on the work of Medicine. He became international in his contacts when he assumed the presidency of the World Medical Association (1950-52). Dr. Henderson was a guest speaker at the MSMS Annual Session of 1950.

* * *

The South Dakota Board of Medical Examiners has announced the passage of legislation creating an annual registration fee for licensees in that state in the amount of $2.00. The registration takes effect January 1, 1954. If you are licensed in South Dakota and wish to maintain that license by payment of the registration fee, please contact the South Dakota Board of Medical Examiners, 300 First National Bank Building, Sioux Falls, South Dakota.

* * *

Direct Alumni Contributors Report.—With twenty-six of the nation's seventy-nine medical schools reporting, 7,272 physicians have donated $242,004.07 directly to their medical school alumni since the first of this year.

* * *

The University of Michigan recently announced promotions for one hundred twenty-one faculty members including several in the Medical School. James W. Rae, Jr., M.D., was made associate professor and chairman of the Department of Physical Medicine and Rehabilitation. Doctors promoted to the rank of professor are: A. James French, M.D., in Pathology and John F. Holt, M.D., in Radiology.

* * *

The American College of Chest Physicians announces the Eighth Annual Postgraduate Course on Diseases of the Chest, at the Hotel Knickerbocker, Chicago, September 28 to October 2. In addition, the Sixth Postgraduate Course on Diseases of the Chest will be held at the New Yorker Hotel in New York City, November 2 to 6, 1953. For information, write the College at 112 East Chestnut Street, Chicago 11, Illinois.

* * *

Speak well of your enemies; remember you made them.
—*Rotogram* (Lansing, Michigan) July 17, 1953.

(Continued on Page 1016)

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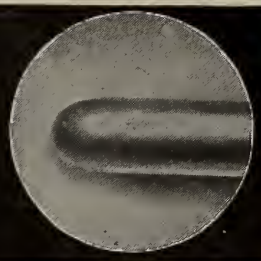
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The American Association of the History of Medicine may hold its 1954 convention at Mackinac Island, attracted by the dedication of the Beaumont Memorial, according to Lambert J. Agin, M.D., of Owosso, an active member of the AAHM.

* * *

Statewide Epilepsy Program Growing.—Although the Michigan Epilepsy Center was founded five years ago under the approval of the Wayne County and Michigan State Medical Societies and the Michigan Society of Neurology and Psychiatry, it has been only in the past two years that the statewide program has been possible. Developed by the late R. L. Dixon, M.D., for many years superintendent of Caro and a leader in the field of convulsive disorder, H. B. Zemmer, M.D., of Lapeer, President of the Michigan Epilepsy Center, and Carleton Dean, M.D., Director of the Michigan Crippled Children Commission, this program has reached seventeen counties and has done 200 electro-encephalograms in two summers of operation.

The entire program of the Michigan Epilepsy Center, located at 96 W. Ferry Street, Detroit, is financed by the United Health and Welfare Fund of Michigan. However, budget restrictions prevent exercise of the "team" concept of staff operation throughout the State as it is practiced at the Center in Detroit. There, staff members, a neurologist, neurosurgeon, physiologist, pediatrician, psychiatrist, psychiatric social worker and psychologist study the patient from their particular point of view, since the staff considers epilepsy a "symptom complex" of multiple causation. When all of the staff's findings and laboratory tests are in, diagnosis is made and recommendations are returned to the referring physician for further management of the case.

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* * *

NORTHWESTERN OHIO MEDICAL ASSOCIATION

The 109th meeting of the Northwestern Ohio Medical Association will be held at the Academy of Medicine, Collingwood Avenue, Toledo, Ohio, Wednesday, October 14, 1953. The program will be as follows:

Morning Session—9:30 A.M.

Registration and Business Meeting: George H. Lemon, President.

"Welcome"—Wendell W. Green, President Toledo and Lucas County Academy of Medicine.

"Psychiatry and the Physician's Responsibility in Teen Age Development and in the Problems of Young Adults."

H. Keith Fischer, M.D., Department of Psychiatry, Temple University School of Medicine, Philadelphia, Pa.

"Recent Advances in Cardiac Surgery."

Charles P. Bailey, M.D., Professor Thoracic Surgery, Hahneman Hospital and Medical College, Philadelphia, Pa.

"Uses and Abuses of ACTH and Cortisone Therapy."

Ernest M. Brown, Jr., M.D., Department of Medicine, University Pennsylvania Medical School, Philadelphia,

Luncheon—12:20 P.M.

Informal roundtable conferences with guest speakers. Social period.

Post Luncheon Session and Election of Officers.

—1:35 P.M.

"News from the Ohio State Medical Association Headquarters."

Charles S. Nelson, Executive Secretary, Ohio State Medical Association.

James R. Jarvis, M.D., Counselor of the 3rd District, Van Wert, Ohio.

Paul F. Orr, M.D., Counselor of the 4th District, Perrysburg, Ohio.

"Ovarian Cancer."

Craig W. Muckle, M.D., Department of Gynecology and Obstetrics, Pennsylvania and Lying-In Hospitals, Philadelphia.

"Advances in Pediatric Surgery."

Wm. Clatworthy, M.D., Department of Surgery, Ohio State University Medical School, Columbus.

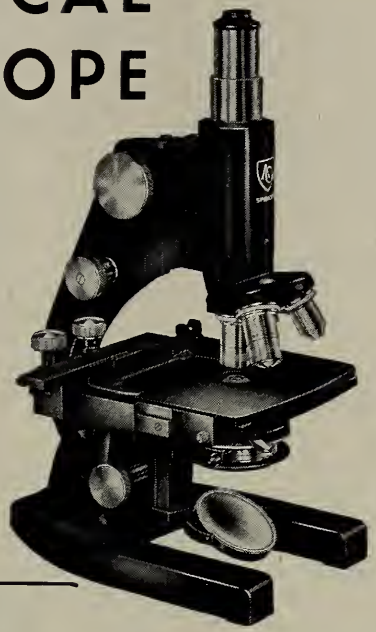
Registration fee for all members and nonmembers is $10.00, including cost of noon dinner.

Reservations should be made with Henry B. Larzelere, Chairman, Northwestern Ohio Medical Association, 1838 Parkwood Ave., Toledo 10, Ohio.

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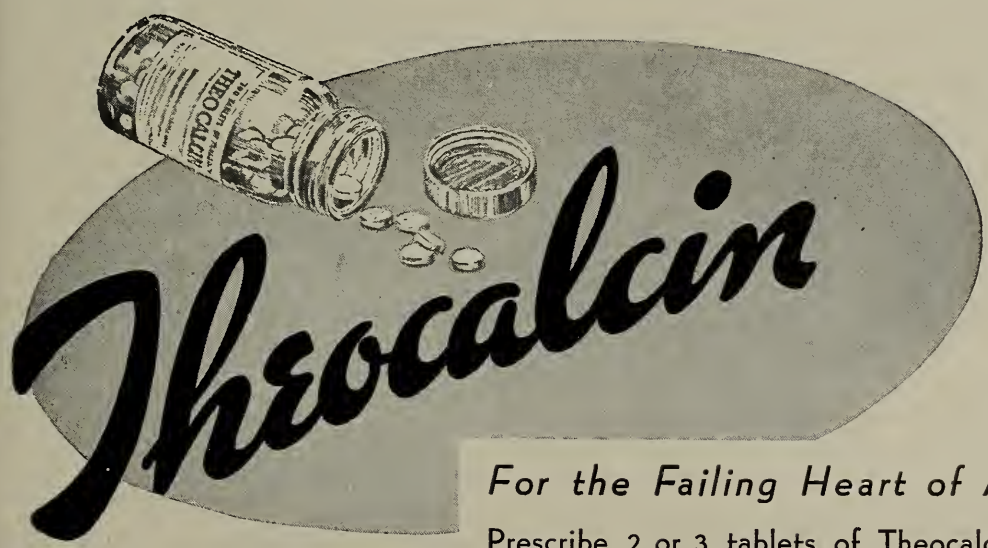
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THE DOCTOR'S LIBRARY

Acknowledgment of all books received will be made in this column, and this will be deemed by us as full compensation to those sending them. A selection will be made for review, as expedient.

CLINICAL ENDOCRINOLOGY. By Lewis M. Hurxthal, M.D., F.A.C.P., Head of the Department of Internal Medicine, Lahey Clinic, Boston; Physician, New England Baptist and New England Deaconess Hospitals, Boston and Natalija Musulin, B. S., M. D. Staff of Cooper Hospital, Camden, N. J. Two, volumes. 482 figures, 146 charts, 1 color plate-volume one. Philadelphia: J. B. Lippincott Co., 1953. Price $24.00-set.

This monumental work covers 1600 pages largely arranged in double columns of text per page; much of this in tabular form in the style currently embraced by the medical pundits on lantern slides. There is no other collection of data in this field comparable to the broad sweep of this presentation, but its very size, in a sense, defeats its own purpose—the putting of the significant data in the hands of the general physician who, in first seeing the patient, has the critical opportunity of directing the essential studies of the case.

The volumes face honestly the gaps in our present knowledge of the endocrine interrelationships. There is inevitably extraneous material which is covered in the broad bibliographies as references to the unpublished data of the senior author, but there is nothing in the overall which can detract from the magnificent concept of this work. It is a necessary addition to the library of every hospital wherein patients are gathered for diagnosis, evaluation and treatment.

W.B.

CLINICAL ORTHOPAEDICS. Anthony F. DePalama, Editor-in-Chief, with the assistance of five Associate Editors and a Board of six Advisory Editors. Volume I, Number 1. Philadelphia: J. B. Lippincott Co., 1953. Price, $6.00.

The need for an additional outlet for the mass of new material of orthopædic interest has recently been achieved in the publication of Clinical Orthopedics, which is now being introduced to the Medical Profession. The purpose of this publication is to provide an additional source which can bring to the specialist, in one publication, new articles that have previously been denied publication due to the lack of space in other journals.

Clinical Orthopedics is being presented in book form with two issues per year. This number may be increased depending on the number of worthy articles submitted. Each issue will be divided into two parts, the first being devoted to the special consideration of some specific topic of orthopedic interest, and the second section covering subjects of general interest. This second section should serve as a means of intercommunication between the interrelated fields of surgery and be of special interest to the general practitioner and the allied specialists.

This publication will fulfill an urgent need to the Orthopedic Surgeon and should be readily accepted by the Medical Profession as a whole.

P.C.K.

AN ATLAS OF SURGICAL EXPOSURES OF THE EXTREMITIES. By Sam W. Banks, M.D., Associate Professor of Orthopedic Surgery, Northwestern University Medical School; Attending Orthopedic Surgeon, Chicago Memorial Hospital and Woodlawn Hospital; and Harold Laufman, M.D., Ph.D., Associate Professor of Surgery, Northwestern University Medical School; Associate Attending Surgeon, Michæl Reese Hospital. 552 illustrations on 179 plates. Philadelphia: W. B. Saunders Co., 1953. Price, $15.00.

"An Atlas of Surgical Exposures of the Extremities" is a much-needed comprehensive treatise of surgical anatomy. It is an exceptionally fine textbook for the intern and resident and for the general surgeon who treats operative fractures. For the specialist it is the ideal refresher for those exceptional cases that require the unusual and difficult surgical approach.

The descriptions of various exposures are easily found in this book inasmuch as the table of contents is divided into sections describing each area of the extremities. The indications for each exposure are given preceding the descripttion of the procedure and the operation is described in detail. This book is beautifully illustrated, not by diagrams, but by artists' drawings, which were done at the time the operation was being performed.

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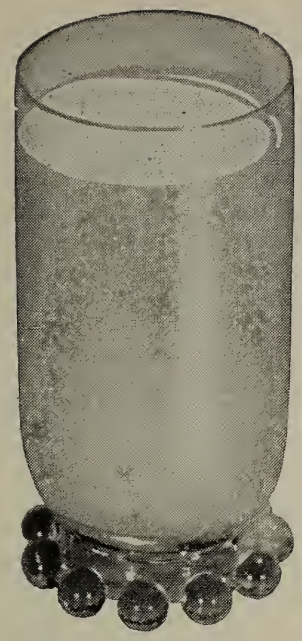
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the surgery of the extremities in every detail and have amply described the pitfalls that the surgeon may encounter. This volume will find much use in the library of every surgeon who does any surgery of the extremities.

P.C.K.

CONDUCTION ANESTHESIA. By George P. Pitkin, M.D., F.A.C.S., F.I.C.A. Edited by James L. Southworth, M.D., F.A.S.C., formerly Senior Surgeon, U.S.P.H.S.; formerly Co-Director, Cardiovascular Clinic, Public Health Service Hospital, Baltimore, Maryland; Attending Surgeon, East Tennessee Tuberculosis Hospital, East Tennessee Baptist Hospital, Knoxville, Tennessee; Robert A. Hingson, M.D., F.A.C.A., F.I.C.A., F.I.C.S., F. (Faculty of Anes.) R.C.S. (England), First Director Anesthesia, Women's Division (Philadelphia Lying-In Hospital) of Pennsylvania Hospital; First Professor of Anesthesia, University of Tennessee School of Medicine; formerly Senior Surgeon, U.S.P.H.S.; formerly Associate Professor of Obstetrics, Johns Hopkins University; Professor of Anesthesia, Western Reserve University, Cleveland, Ohio; and Winifred M. Pitkin, M.A. (Oxon.) B.M., B.Ch.(Oxon.), M.R.C.S. (England) L.R.C.P. (Lond.) M.D., Assistant in Surgery to the Late George P. Pitkin. 585 illustrations. Second edition. Philadelphia: J. B. Lipincott Co., 1953. Price, $22.50.

This book, of considerable proportion, thoroughly revised in the new second edition, still reflects Dr. Pitkin's basic concepts about conduction anesthesia but adds much new material. The term "conduction anesthesia" as used in the text denotes interruption of nerve conduction, principally sensory conduction and without loss of consciousness. It includes local infiltration, nerve blocking and combinations thereof; single injection and continuous spinal anesthesia; caudal block, peridural block and refrigeration anesthesia.

The text contains several new chapters. For example, there is one on "landmark" anatomy, another on topical anesthesia, another on complications and prevention of complications with proper drugs and method emphasized.

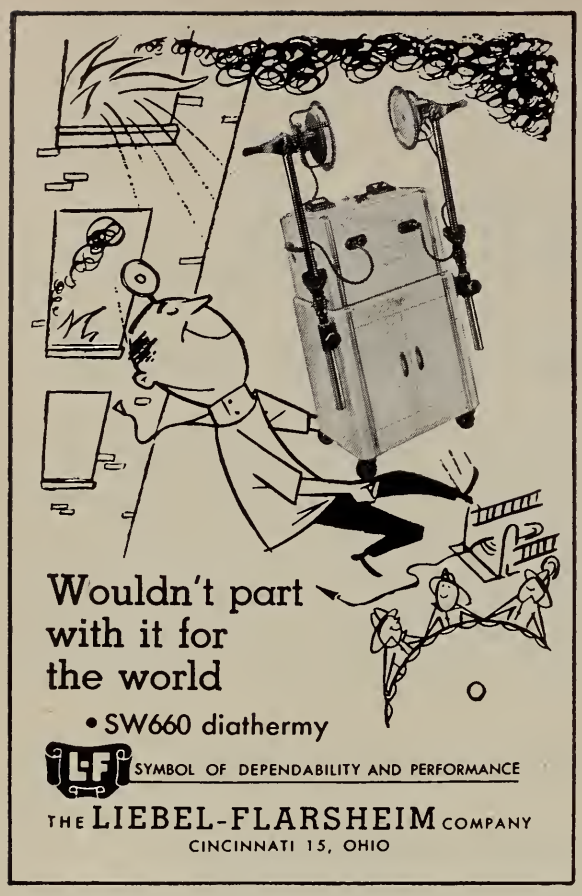
All physicians who use conduction anesthesia will find this text a source of reference.

J.W.H.

SURGICAL FORUM. Proceedings of the Forum Sessions, Thirty-Eighth Clinical Congress of the American College of Surgeons, New York City, September, 1952. Surgical Forum Committee: Owen H. Wangensteen, M.D., F.A.C.S., Minneapolis, Chairman; J. Garrott Allen, M.D., F.A.C.S., Chicago; Warren H. Cole, M.D., F.A.C.S., Chicago; Robert E. Gross, M.D., F.A.C.S., Boston; Carl A. Moyer, M.D., F.A.C.S., Dallas; I. S. Ravdin, M.D., F.A.C.S., Philadelphia and H. B. Shumaker, M.D., F.A.C.S., Indianapolis. Philadelphia: W. B. Saunders Co., 1953. Price, $10.00.

This book, a yearly venture, is the result of the vision and foresight of Dr. Owen H. Wangensteen. The Surgical Forum conducted by the American College of Surgeons allows the young doctor an opportunity to present studies in surgical research. The older doctor is well

Say you saw it in the Journal of the Michigan State Medical Society



advised to pay attention to the thinking of these young men. To be exact, 345 men have contributed to this volume.

The contents of the book are divided into sections on Stomach; Heart and Great Vessels; Heart and Blood Circulation; Gynecology, Obstetrics and Anesthesia; Lungs and Liver; Shock; Portal Hypertension, Liver, Pancreas and Blood Coagulation; Water Balance and Electrolytes and Plastic Surgery.

It almost goes without saying that every surgeon and surgical resident should add this volume to his library.

J.W.H.

LETTERS TO A DOCTOR'S SECRETARY. By Anna Davis Hunt. *Medical Economics.* East Rutherford, N. J., 1952.

This little booklet is an assembly of socalled letters to a Doctor's Secretary which have been published from time to time in *Medical Economics.* They are so timely and so enlightening they should be given to every doctor's secretary. If she is the best secretary in the world, as she undoubtedly is, still a perusal of this little book would be valuable.

DE KRUIF ADMITS MISTAKE

(Continued from Page 999)

coordinator of its relations with the medical profession as a whole.

The Plan Presented

In July, 1951, stated on less than one page of double-spaced typescript, the plan was placed by the present writer before Mr. Henry J. Kaiser, Mr. Henry J. Kaiser, Jr., Mr. E. E. Trefethen, Jr., Dr. Sidney R. Garfield and Mr Robert Elliott.

"What would we have to pay him?" asked Mr. Kaiser.

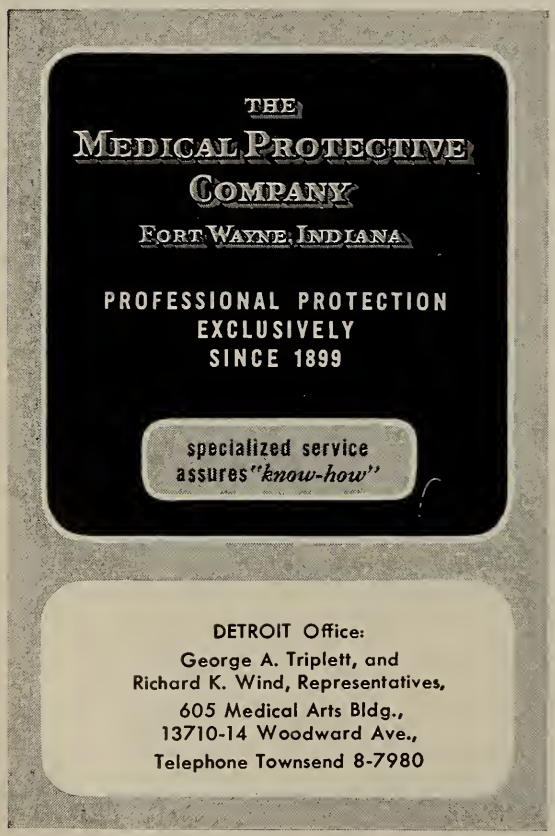
"To give him executive authority, it would seem he should be paid what you pay Dr. Garfield," this writer replied.

The present writer was assured that the man would be invited for discussion of the project. By now readers may be curious as to his identity. The man was Dr. Karl Friedrich Meyer, Director of the Hooper Foundation.

As of today, that promised discussion has not taken place, and not because of hesitancy on the part of Karl Meyer.

Thus ended the present writer's hopes for the Kaiser-Permanente health plan. Such has been his mistake and for that he can only admit—*"mea culpa."*

In California's medicine he has high faith. California's medical honesty is creating a new kind of doctor, the personal physician. Of that new type of human being this writer hopes to tell in a book (a tough job that will take a long time) *The New Man of Medicine.* —PAUL DEKRUIF





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PROGRESS IN CANCER CONTROL

(Continued from Page 928)

in research, steady progress continues to be made in the care of the cancer patient. Improved methods of diagnosis, refinements in surgery, the increasing range and force of radiotherapy, the better control of the use of anesthetics, of transfusions and of antibiotics, the increasing concern for the physical and psychological rehabilitations of the cancer patient—all these are combining to raise the cure rates of one or another type of cancer by one or two per cent a year. Whatever revolutionary advances in the control of cancer may or may not develop in the next few years, this kind of slow relentless progress will continue.

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* * *

Cancer, uncontrolled, takes the life of the individual unfortunate enough to be that cancer's host.

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Surgical Technic, Surgical Anatomy and Clinical Surgery, four weeks, starting October 26
Surgical Anatomy and Clinical Surgery, two weeks, starting November 9
Gallbladder Surgery, ten hours, starting October 26
General Surgery, one week, starting October 5
Surgery of Colon and Rectum, one week, starting September 21
Basic Principles in General Surgery, two weeks, starting September 21
Thoracic Surgery, one week, starting October 12
Esophageal Surgery, one week, starting October 19
Breast and Thyroid Surgery, one week, starting October 26
Fractures and Traumatic Surgery, two weeks, starting October 26

GYNECOLOGY—Intensive Course, two weeks, starting September 21
Vaginal Approach to Pelvic Surgery, one week, starting November 2

OBSTETRICS—Intensive course, two weeks, starting October 5

DERMATOLOGY—Intensive Course, two weeks, starting October 19

MEDICINE—Electrocardiography and Heart Disease, two weeks, starting October 12
Intensive General Course, two weeks, starting September 28
Gastroenterology, two weeks, starting October 26
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THE JOURNAL
of the Michigan State Medical Society

VOLUME 52 OCTOBER, 1953 NUMBER 10

Contributors to This Issue



J. W. Conn, M.D.



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R. C. Moehlig, M.D.



W. S. Reveno, M.D.

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You and Your Business

A TASK AND A WARNING

Mrs. Oveta Culp Hobby, Secretary of Health, Education and Welfare, voiced the views of the current Administration in Washington when she told the 1953 meeting of the AMA House of Delegates that organized medicine must find solutions to the socio-economic problems facing Medicine today or the solution would be taken out of its hands.

She declared that the "impairment of the principle of a free choice and consent in medical care," which "is inherent in a compulsory program of medical care, therefore represents a break in the fabric of our democratic system."

"The Administration," Mrs. Hobby added, "is looking first to the physicians of the country for leadership in meeting this challenge. Second, it looks to the individual citizen to meet his responsibilities; by making full use of resources made available to him through modern medicine for the preservation of his health, by prudent participation in prepaid plans for medical care, and by assumption of common responsibilities for the advancement of the health of our nation.

"Thirdly, this Administration looks to the community, acting both through its private voluntary associations and its governmental bodies, for help in meeting this challenge."

WAYNE COUNTY MEDICAL SOCIETY AND DETROIT FREE PRESS SPONSOR SEVEN-WEEK MEDICAL FORUM

An unusual seven-week program, planned to give Detroiters the latest and most accurate information on common illnesses, is being staged this fall by the Wayne County Medical Society in co-operation with the *Detroit Free Press.*

This Medical Forum started in late September and will run through November with weekly programs, all held in the Rackham Memorial Auditorium, Detroit.

Each of the seven weekly meetings in the series will deal with a different subject of medicine or health. The public has been invited to attend, free of charge. The *Free Press,* in several editions, offered a ballot which listed a number of subjects and provided blank spaces for others, to be filled out by the readers.

The Forum is a public service enterprise. The lecturers will be representatives of the entire medical profession of the area who promise plain answers to medical questions.

As the *Free Press* stated in its Sunday, August 23, announcement of this Medical Forum: "The purpose is to bring the public the truth about medical problems which concern the people most."

PROPOSED WIDENING OF SOCIAL SECURITY MEETS OBJECTIONS

The national organizations of doctors of medicine, lawyers and dentists objected to the Administration's recent plan to bring their members under Social Security. A spokesman for the AMA said that his organization is "definitely and officially opposed" to including doctors of medicine in Social Security. The AMA's Bureau of Medical Economic Research estimated that 150,000 to 175,000 of the nation's 215,000 M.D.'s would receive coverage under the proposal—but the plan doesn't fit the economic pattern of a physician's life. "Under the plan, if you earn more than $75 a month after you are sixty-five, you don't collect, and many doctors would never benefit from the system," stated the AMA's spokesman.

HIGHLIGHTS OF EXECUTIVE COMMITTEE OF THE COUNCIL

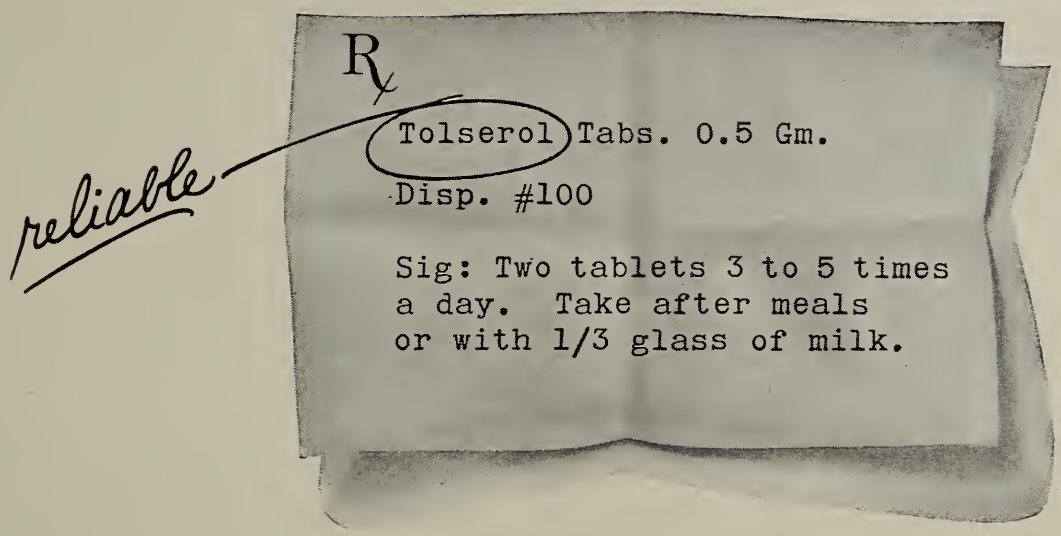
August 12, 1953

Forty-nine items were presented to the Executive Committee of The Council on August 12. Chief in importance were:

- *The monthly financial reports* and bills payable were studied and approved.
- *A legal brief* on Michigan statutes covering fees for surgical assistants was requested of the MSMS Legal Counsel.
- *Committee Reports*—The following reports were given consideration: (a) Committee on Venereal Disease Control, meeting of July 10; (b) Committee on Arbitration, meeting of July 17; (c) Study Committee on Basic Science Act, meeting of July 29; (d) Public Relations Committee, meeting of August 2.
- *William Bromme, M.D.,* Detroit, was authorized to attend a meeting in Chicago on September 1 of representatives of the AMA and representatives of veterans organizations. The fine liaison work being done in Michigan with the various veterans organizations and the need to continue this on the national level was discussed.
- *Statement of R. H. Pino, M.D.,* Detroit, concerning the status of medicine as big business

(Continued on Page 1032)

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SQUIBB

EXECUTIVE COMMITTEE OF THE COUNCIL

(Continued from Page 1030)

and needed reorganization in the AMA was referred to a Special Committee (President, President-Elect, Council Chairman and Speaker of House of Delegates) to digest and to report to The Council on September 20, for ultimate presentation to the House of Delegates on September 21.

- *Organization of an over-all Cancer Co-ordinating Committee,* representative of MSMS, Michigan Department of Health, Michigan Health Officers Association, Michigan Division of the American Cancer Society, Southeastern Michigan Division of the American Cancer Society, and the Michigan State Dental Society, was announced by President-Elect L. W. Hull, M.D., Detroit.
- *The 1953-54 Beaumont Memorial Committee* personnel was announced by President-Elect Hull.
- *A Subcommittee of the Child Welfare Committee* on School Health Problems was authorized and is to be appointed by Chairman G. E. Anthony, M.D., of Flint.
- *Reappointment of A. Hazen Price, M.D.,* Detroit, as MSMS representative to the Advisory Committee for Practical Nurse Education, a committee of the Michigan Dept. of Public Instruction, was approved.
- *Report of A. C. Furstenberg, M.D.,* Ann Arbor, re meeting of the Committee for the National Fund for Medical Education, was presented and approved, with thanks.
- *The Annual Reports* of all MSMS Committees were presented by Secretary Foster and ordered published in the Handbook for Delegates, for presentation to the House of Delegates on September 21 in Grand Rapids.
- *"Golden Goose" Breakfast* of September 24 in Grand Rapids. All Michigan hospitals have certified the names of their chiefs of staff, for invitation to the Golden Goose Breakfast, to be held during the MSMS Annual Session. The program of this meeting was approved. All MSMS members present in Grand Rapids on September 24, are to receive invitations to attend this complimentary breakfast.
- *The House of Friendship* assignments for the 1953 Annual Session (Hospitality Committee) were made, including all members of The Council.
- *Compliments* from the Michigan Bell Telephone Company on the MSMS Secretary's Letter of July 22, 1953, were read and ordered placed on file.
- *Suggested covers for JMSMS* for the year 1954 were presented by Editor Wilfrid Haughey, M.D., Battle Creek, and approved; Dr. Haughey also recommended an interprofessional number of JMSMS to include articles by lawyers, architects, et cetera.
- *Public Relations Counsel's report* included (a) request from Metropolitan Life Insurance Co. for a letter from MSMS re distribution to Michigan theaters of the film "Losing to Win," a movie on weight control which request was granted; (b) reprints of the Bob Goldman article "The Truth about Russian Medicine" published in *Parade Magazine,* was referred to the AMA for consideration; (c) progress report on contacts and medical P.R. in general.
- *Grand View Hospital.* A letter from the Gogebic County Medical Society requesting assistance in a pending legal suit, was discussed. This request is to be granted if the Gogebic County Medical Society secures approval of the Attorney of Record.

MEDICAL MEETINGS AND CLINIC DAYS

A list of known medical meetings and clinic days, sponsored by county medical societies and other physicians' groups in Michigan, follows:

1953		
Nov. 9-10	State Medical Journal Conference (AMA)	Chicago
Nov. 18	Executive Committee of The Council (MSMS)	Detroit
Dec. 16	Executive Committee of The Council (MSMS)	Detroit
Dec. 1-4	AMA Clinical Session	St. Louis, Mo.
1954		
Jan. 28-30	The Council (MSMS)	Detroit
Jan. 31	County Secretaries-Public Relations Conference	Detroit
Mar. 9	American College of Surgeons, Michigan Chapter	Sheraton-Cadillac Hotel, Detroit
Mar. 10-12	Michigan Clinical Institute	Sheraton-Cadillac Hotel, Detroit
Apr. 14	Genesee County Medical Society Ninth Annual Cancer Day	Flint
May 12	Annual Clinic Day and Alumni Reunion of the Wayne University College of Medicine, Hotel Fort Shelby	Detroit

Additions to this list of meetings are invited by the Editor of JMSMS, in order to make this monthly announcement complete and accurate.

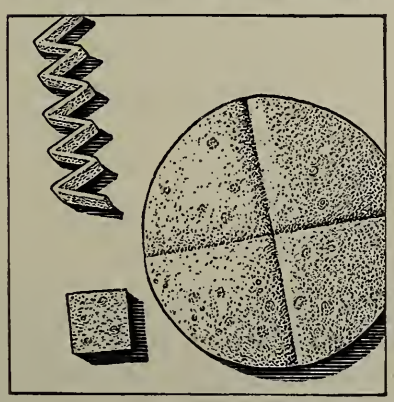
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Doctor Rector . . . Twenty-three Years of Service



Frank L. Rector, M.D., Lansing, retired on October 1, 1953, from active participation in the cancer control program after twenty-three years of service in that field.

For eleven years, he was the midwestern Field Representative of the American Cancer Society, Inc., during which time he made detailed cancer surveys in eight states. This was followed by five years as Cancer Consultant for the Michigan Department of Health. For the past seven years he has been the secretary of the Cancer Control Committee, Michigan State Medical Society.

During his years of service, Dr. Rector developed a keen interest in lay cancer education, especially among high school age groups. In addition to preparing the text of "The Story of Cancer for High Schools," recently published by the Cancer Control Committee, he has published many articles in medical, nursing and educational journals. He has spoken to more than 925 high school audiences and to an equal or greater number of adult lay groups.

In 1952, he was the first recipient of the award of the Public Health Cancer Association of America, at its annual meeting in Cleveland, Ohio, for his contribution to cancer education and control. In March, 1953, the Michigan State Medical Society presented him with a scroll of appreciation for his efforts in lay cancer education.

FEDERAL COURT HOLDS NAMES AND ADDRESSES OF PATIENTS ARE NOT CONFIDENTIAL

The Commissioner of Internal Revenue issued a summons directed to a hospital to appear before a special agent at a given time and place to give testimony as to the tax liability of a member of the medical staff. The summons required the production of books, papers and records and specificially required the records of the names and addresses of this doctor's patients admitted to the hospital on his instructions during a four-year period. At the bottom of the summons a sentence was typed as follows:

"Appearance is waived if the agent is permitted to examine the records or if the desired information or data is submitted by your institution."

The administrator of the hospital refused to comply with the summons or to permit the examination. The information or data was not submitted.

An order was thereafter issued by the court requiring that the hospital permit the examination of its records by an agent of the Internal Revenue Bureau. The representatives of the hospital and the physician appeared before the court and expressed their uncertainty as to whether the voluntary productions of the information desired would be in violation of Section 352 of the New York Civil Practice Act. The hospital and the doctor sought to vacate the order upon the ground that compliance with the order would constitute the divulging of privileged and confidential communications.

Actually the only question remaining for decision was whether the furnishing of the names and addresses of a doctor's patients by the hospital from or by its records would infringe upon the prohibition or privilege provided in the statute.

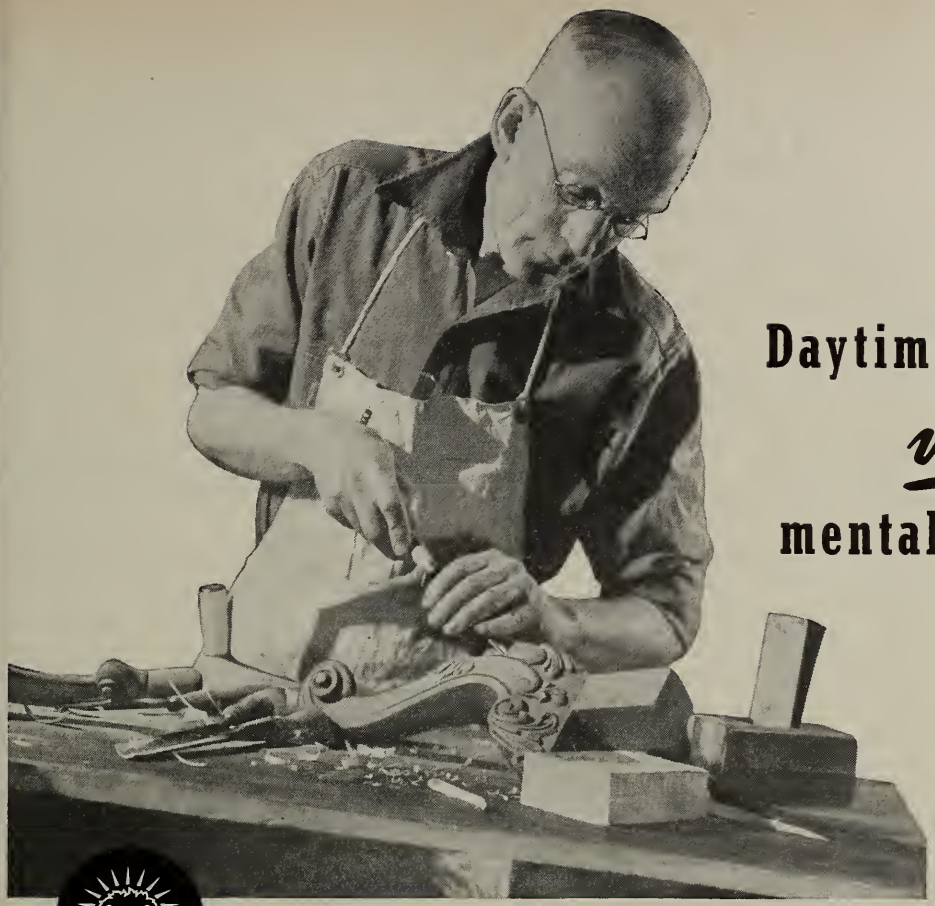
The courts have held that the nature of the privilege has never been extended to prohibit the disclosure of evidence as to facts not acquired in a professional capacity. Incidents and facts which are plain to the observation of anyone are to protect the patient in his relationship with the physician and to prevent the disclosure of information which might result in humiliation, embarrassment or disgrace.

An examination of the New York precedents, said the court, leads to the conclusion that the information requested by the Commissioner of Internal Revenue was not privileged.

"This court cannot understand how a person is injured by the disclosure of the fact that he has received the services and care of a hospital, and has been attended by a certain physician. These are everyday incidents of life occurring openly and with notoriety. The patient does not secrete his entry into the hospital, neither does the doctor mask his identity when entering the home or room of his patient. Any injury to the patient is hypothetical rather than actual. Inasmuch as there is no positive evidence here that the books and records of the hospital cannot be inspected to obtain the information authorized without the disclosure of information which properly be termed confidential, the motions will be denied. The hospital, however, is to take all precautions necessary so diagnosis of his illness shall not be disclosed. If further instructions as to the procedure to be followed is desired of this Court by any party, application may be made therefore."

(In the matter of the Application to Examine the Books and Records of the Albert Lindley Lee Memorial Hospital, U. S. District Court, Northern District of N. Y. Stephen W. Brennan, Justice; decided February 25, 1953).

—*Michigan Hospital Association Bulletin*, July, 1953.



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Heart Beats

MEMORIAL FUND PRODUCES PROMISING RESEARCH

Headlines appeared recently in the nation's scientific journals citing special progress in research on the use of chemicals in aiding arteries.

The story behind these headlines was written in Michigan by a research team at Wayne University, working under a Memorial Fund grant from the Michigan Heart Association.

As one report stated: "the new discovery indicates that the sodium salt of ethylenediaminetetraacetic acid (commercially known as Versene) can control the manner in which the body handles the fatty substances which it takes in." The extensive research studies, which have been carried on over a period of three years, are providing an important clue to unlocking many of the hidden secrets of atherosclerosis.

Particularly noteworthy is the fact that this research was made possible by "in memoriam" gifts. Instead of sending gifts that wither—the donors have, in effect, given research that lives, for the Memorial Fund is a special project of the Michigan Heart Association dedicated particularly to research in cardiovascular diseases. It derives its sole support from memorial contributions of an ever-increasing number of persons who find deep satisfaction in providing a "living memorial" to a deceased friend, relative or associate.

The investigations on Versene are being carried out by Albert J. Boyle, M.D., Henry S. M. Uhl, M.D., Gordon B. Myers, M.D., Bennie Zak, Ph.D., Albert Slatkis, Ph.D., and Mr. Harold Brown (a research fellow). The four financial grants which total more than $20,000.00 were made for the fiscal year beginning July 1, 1953.

In addition to monies allocated for these research studies the following research projects are also receiving financial support from the Michigan Heart Association Memorial Fund:

Harper Hospital—Research Division—Detroit, Michigan
Grant: $4,200.00
Investigators: Aran S. Johnson, M.D., Robert A. Gerisch, M.D., Harry C. Saltzstein, M.D., S. R. Scheinberg, M.D.

University of Michigan—Ann Arbor, Michigan
Grant: $3,000.00
Investigator: Franklin D. Johnston, M.D.

University of Michigan—Ann Arbor, Michigan
Grant: $5,500.00
Investigator: David F. Bohr, M.D.

In addition to the Memorial Projects, the Michigan Heart Association is providing financial support, amounting to more than $78,000.00 during the current fiscal year, to sixteen other important heart research projects.

The Michigan Heart Association has expressed its grateful appreciation to Michigan's Doctors who have, and are now urging gifts directly to the Memorial fund of the Association. Deductible for income tax purposes these gifts serve the highly useful purpose of providing funds used especially for research studies in the field of cardiovascular diseases. Memorial Contributions can be made directly to the Michigan Heart Association, 4421 Woodward Avenue, Detroit 1, Michigan. Of course, special acknowledgments are made to donors and next of kin immediately upon receipt of memorial contributions.

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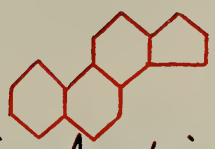
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PR REPORT

SPARKED by Science Writer Jack Pickering of the *Detroit Times,* Detroit newspapermen were quick to expose the "log jam" in the State Basic Science Board office which has prevented many qualified M.D.'s from moving to Michigan to enter practice. Realizing that one man's attitude was at odds with the best interests of the citizens of Michigan, the reporters went to work to place the facts before the public.

The problem is one which MSMS has recognized for some time, one of sufficient importance to cause the 1952 House of Delegates to appoint a special study committee. It is hoped that by the time this number of THE JOURNAL is published, the current Basic Science "log jam" will be unblocked. Both MSMS and the Governor's Office are working towards that end as we go to press (September 9, 1953).

JUST RELEASED for television are three excellent film features and one series of six five-minute "shorts." Brand new are "Operation Herbert" and "A Citizen Participates" running about 28 minutes each and dealing with timely medical subjects of wide general interest. "Your Doctor," the excellent 15-minute documentary film produced by Louis de Rochemont which was hailed in its commercial theater showings, has just been made available for the first time for television.

All are reserved exclusively for use by medical societies and may be booked through the AMA Television Film Library or the MSMS Public Relations Department.

"Operation Herbert" has a humorous touch, but effectively demonstrates how it costs less to have an appendectomy now than it did in 1937. Jackie Kelk, popular screen and TV actor, is starred. "A Citizen Participates," a documentary-type story actually filmed in a small Kansas town, tells how a citizen sparks a campaign to bring an M.D. to a small town.

"What To Do" is the title of the five-minute series. The six films deal with common home medical problems.

"Operation Herbert" and "A Citizen Participates" are also available for showing to schools and clubs. The latter is particularly adapted to Kiwanis clubs, since Kiwanians play a part in it.

A GENEROUS SUPPLY of PR inspiration and information for a new year of activity was acquired by MSMS and county society leaders, as well as by staff members, at the annual AMA Public Relations Institute in Chicago, September 2 and 3. Michigan representatives also played important roles in conducting the Institute.

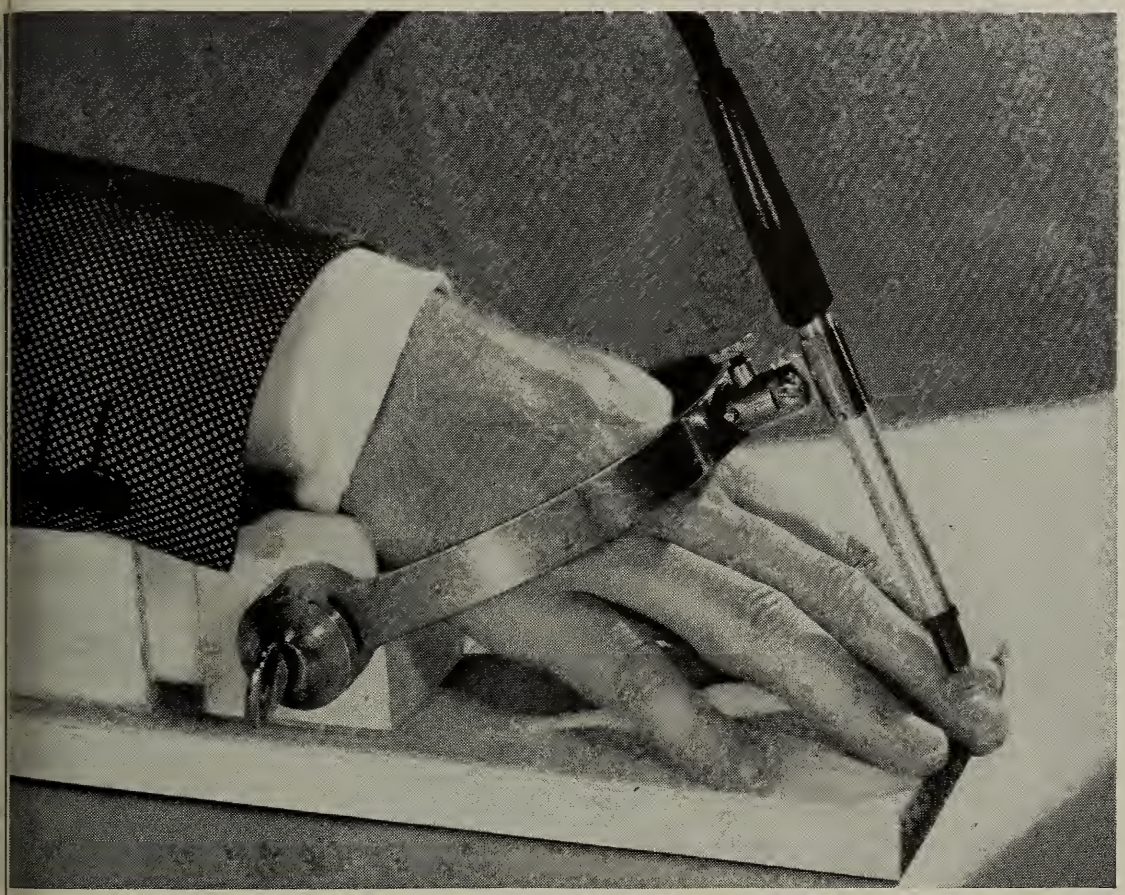
Serving on the three-man panel in one of the most popular clinic sessions, which dealt with the subject "What Methods Can Be Used to Combat Cultists and Quacks?" was Orlen J. Johnson, M.D., of Bay City, PR Chairman of the Bay County Medical Society.

Hugh W. Brenneman, PR Counsel for MSMS, was chairman of a much-discussed session in which audience members broke up into small "PR committees," each committee developing a PR program tailor-made to meet a "hypothetical" situation embracing actual day-to-day medical PR problems.

The MSMS delegation was headed by C. Allen Payne, M.D., of Grand Rapids, Chairman of the Public Relations Committee. Among other Michigan representatives were W. G. Gamble, Jr., M.D., Bay City, MSMS PR Committee member; H. C. Bodmer, M.D.. Kalamazoo, PR Chairman of the Kalamazoo County Medical Society; John R. Pedden, M.D., Grand Rapids, President-elect of the Kent County Medical Society; Mrs. W. S. Stinson, Bay City, now President of the MSMS Woman's Auxiliary; Mrs. O. J. Johnson, Bay City, and the MSMS Public Relations staff.

AN OUTSTANDING CONTRIBUTION to the AMA Conference on Veterans' Medical Care in Chicago, September 1, was made by William Bromme, M.D., of Detroit, Chairman of The Council, MSMS, in keeping the discussion of non-service connected disabilities "on the beam." His concepts were bolstered by an understanding of the veteran's viewpoint gained through the effective liaison developed at the state level in recent years between MSMS and four major veterans' organizations. Others from Michigan at the conference were Hugh W. Brenneman, MSMS Public Relations Counsel, and John W. Castellucci, Detroit, Assistant to the Director, Michigan Medical Service.

Physiological test compares Kent's "Micronite" Filter with other cigarette filters



compare the efficiency of various ers as they affect physiological re- nses in the cigarette smoker, drop surface skin temperature at the last alanx was measured.

Using well-established procedures, subject smoked conventional filter arettes and the new KENT with exclusive "Micronite" Filter.

For every other filter cigarette, the op in temperature averaged over 6 grees. For KENT's Micronite Filter, ere was no appreciable drop.

These findings confirm the results of her scientific measurements that ow these facts: ordinary cotton, cel- ose or crepe paper filters remove a all but ineffective amount of nico- e and tars; KENT's Micronite Filter *approaches 7 times the efficiency of other filters in the removal of nicotine and tars* and is virtually twice as effective as the next most efficient cigarette filter.

Thus KENT, with the first filter that really works, gives the one smoker out of every three who is susceptible to nicotine and tars the protection he needs . . . while offering the satisfaction he expects of fine tobacco.

For these reasons, smokers have made the new KENT the most popular new brand of cigarette to be introduced in the last 20 years.

If you have yet to try the new KENT, may we suggest you do so soon?



Takes out up to 7 times more nicotine and tars than other filter cigarettes

Editorial Comment

GERIATRIC AVALANCHE IN MOTION

The *Pennsylvania Medical Journal* for August, 1953, has a strong Editorial, with the above title, referring to a paper by Frank A. Weiser, M.D., of Detroit, which appeared in THE JOURNAL of Michigan State Medical Society for May—was the lead article—title, "General Considerations in Geriatrics."

Editor Donaldson of Pennsylvania was much pleased with the paper and quotes freely from it.

THE 1952 MEDICAL CARE DOLLAR

The Bureau of Medical Economic Research has recently published another item in its series on personal consumer expenditures for medical care based on data recently issued by the United States Department of Commerce. Total personal consumer expenditures for all goods and services rose from 208 billion dollars in 1951, to 218 billion in 1952. The medical care portion increased from 9.0 billion dollars to 9.6 billion dollars, from 4.3 per cent to 4.4 per cent of the total; an unknown portion of this increase was due to the large number of births. The physician's share of the personal consumer dollar spent for medical care decreased from 28.1 cents to 27.8, while the hospital's share rose from 24.0 cents to 24.8. Thus the data for 1952 indicate a continuation of the long trend downward for the physician's share and upward for the hospital's share. The dentist's share also declined slightly.

On the basis of these data and other data published by the United States Department of Labor, this study reports that in 1952, as in 1951, 54 per cent of an average week's wages of production workers in manufacturing industries was required to purchase the same amount of medical care and drugs that would have required an entire week's wages in the base period 1935-1939. The corresponding percentage for physicians' services was 50 in both years.—Editorial, *The Journal of the American Medical Association,* August 22, 1953.

HOW TO BECOME A MOSS-BACK

Younger members sometimes grumble that our society is controlled bv entrenched moss-backs—a clique of medical politicians.

This criticism does not appear to be based on fact. Of the current officers, barnacle-encrusted President Ralph A. Johnson, age forty-seven years, is the oldest. For the secretary and president-elect, Life Has Just Begun. As for committee membership, a survey reveals that reappointments correlate well with the previous year's attendance and work record. Members, able and willing to work, are utilized again and again. Inactive members are quietly replaced.

What the grumble about moss-backs usually indicates is frustration: the grumbler would like to play a more active role in the society, but, modest, relatively unknown, and proud, he does not know how to get started. He knows he has good ideas; he is willing to work; failure to be assigned a job in the society must represent a sinister hunger for power by the entrenched moss-backs—the clique of medical politicians.

It is not difficult for a member to become active in society affairs. *First,* the younger member should make himself known to his colleagues in the society. This can be accomplished by participation in both scientific and social activities. On the scientific side, he may participate in the programs of his Branch Society, the Central Medical Society, and even in those of the County and State Societies. On the social side, he should attend some of the Monday Night Dinners preceding the regular scientific meetings of the Wayne County Medical Society. Recommended also is participation in the society sponsored bowling and golf tournaments, and attendance at the President's Ball. Friends are easily made at these affairs. *Second,* if he is willing to participate in committee work on any of the more than forty committees of the Society, he should apprise the President-Elect of this willingness. Committee work is an excellent introduction to understanding the mechanics of operation of the Medical Society. *Third,* the younger member also has access to the Letter Box of the *Detroit Medical News.* Here he may record his ideas and constructive suggestions for consideration by the membership. Only "Rant and Rave" is more widely read than "Letters to the Editor."

By following these precepts, younger members will quickly become active participants in society affairs. They will learn how the society operates, will contribute vigorous ideas and vitality to its strength, and will derive wisdom and judgment from the counseling of their older colleagues. And then, one day, they may discover that, by some weird alchemy in the caldron of experience, they have been transmuted (more's the pity!) into moss-backs and medical politicians.—MILTON R. WEED, Editorial in *Detroit Medical News,* August 24, 1953.

Some patients have conscious or unconscious feelings of guilt and assume that the cancer is punishment for their guilt.

The JOURNAL
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Obesity: Key to the Prevention of Diabetes

By William H. Olmsted, M.D.
St. Louis, Missouri

THE PROOF of the existence of the large number of unknown diabetics in this country has stimulated the medical profession to study ways and means leading to their discovery and treatment. Important as diabetes detection is, it presupposes the occurrence of diabetes but does not attempt its prevention. This paper briefly summarizes the facts that prove obesity the most important factor in the etiology of diabetes. The widespread presence of the recessive gene for diabetes in the population would be extremely difficult to eradicate. On the other hand, obesity is quite vulnerable to educational attack.

The relationships of obesity to diabetes will be considered under four headings: (1) Hypernutrition requires the secretion of large amounts of insulin; (2) Clinical facts prove that obesity precipitates and aggravates diabetes; (3) Experimental obesity predisposes to diabetes; and (4) Mortality statistics emphasize the etiological importance of obesity.

Insulin Requirements and Obesity

The functions of insulin are but partially known. In general, one can say that insulin augments the following physiological mechanisms: (1) The formation of glycogen in liver, muscle and other tissues; particularly its formation in adipose tissue.[31] (2) The oxidation of glucose. (3) The formation of fat from glucose. (4) The anabolism of proteins. These processes are brought about by enzymatic reactions and there is evidence to show how they are brought about. First, insulin speeds up the phosphorylation of glucose. This step is necessary for all the above functions. Secondly,[8] it makes possible the use of two carbon fragments to build up fatty acids and probably proteins also. Glycogen[28] can be formed after phosphorylation by conjugation, or it can be formed from two carbon fragments. In the latter instance insulin is not required. Schoenheimer[25] first showed clearly by the use of deuterium that fat is formed constantly from carbohydrate and not as formerly believed only when calory intake exceeded output. Thus the amount of fat formed from carbohydrate determines to a large extent the insulin need. Stetten[26,27,28,29] and others[3,20] have shown that much more carbohydrate goes to form fat than to form glycogen. This is true even when the animal's weight is stationary. When fat is being accumulated the insulin need is at its maximum. On the other hand, when the animal is starving and mobilizing his body fat for fuel, no insulin is needed for that process. By the analyses of rat pancreases for insulin, Haist[13] in Best's laboratory showed that the beta cells rested during starvation and when a high fat diet was fed. Thus dietary fat probably does not require insulin to be oxidized or stored; however, the diets consumed by those gaining weight consist usually of at least 50 per cent carbohydrate. Not only is the need for insulin increased by the formation of fat from carbohydrate but as weight is gained and the basal calories increase the need for insulin increases to support the increased metabolism. If the process is reversed with an intake of fewer calories than needed, insulin need is greatly decreased because less fat is being formed from carbohydrate and the basal calories are lowered as the body decreases in size.

TABLE I. RELATIONSHIP OF DIABETES TO OBESITY IN THE POPULATION PAST FORTY YEARS OF AGE

Known Diabetics	Unknown Diabetics	Total Diabetics	Diabetics 20 per cent Overweight	Population 20 per cent Overweight
850,000	900,000	1,750,000	875,000	4,000,000

Obesity and Diabetes: Clinical Facts

Frederick Allen, forty years ago, first proved experimentally the favorable effect of undernutrition and conversely the detrimental effect of overnutrition on diabetes. Today authorities will agree to the principle of the initial reduction of all overweight diabetics. Reducing weight to normal in the obese diabetic may, as Newberg and Conn[22] showed, change the sugar tolerance curves from a high sustained one to the normal type. In the case of the diabetic receiving small amounts of insulin, he will be able to do without it and even if larger amounts are required before reduction, only a small dose, or none, will be needed afterward. There can be no doubt that reduction of weight rivals insulin in its therapeutic import.

Joslin[16] has shown that obesity precedes diabetes in 85 per cent of the cases. This is true after the age of forty. And most important is the fact that 50 per cent of men and 60 per cent of women are 20 per cent overweight. Armstrong,[1] et al, estimate there are five million people over the age of thirty who are 20 per cent overweight in this country. Of these, four million are past forty years of age. There are eight hundred and fifty thousand known diabetics past forty, and an estimated nine hundred thousand *unknown* diabetics in this age group. These facts are summarized in Table I.

Of those 20 per cent overweight and past the age of forty, one out of nine is a known diabetic and one out of four or five is a known or unknown diabetic.

Not only are these figures significant from the standpoint of etiology, but they are of invaluable help in the detection of the unknown diabetic.

Experimental Obesity and Diabetes

Within the past ten or more years the production of obesity in animals has been accomplished. Three methods have been demonstrated: (1) Forced feeding through a tube[11]; (2) Injury to the ventrolateral and ventromedial nuclei of the hypothalamus in the rat, cat, dog and man;[4,5,6,7,9,14,23] (3) Breeding of genetically obese mice.[2,12,15,17,18,19]

Overnutrition is common in man but laboratory animals as a rule are less likely to overeat, unless forced fed. Engel[11] et al produced obesity on rats by tube feeding. These rats became temporarily diabetic, if in addition to the forced feeding they were injected with both the growth and adrenocorticotrophic hormones. The islets of these animals were hypertrophied but even so their insulin apparatus was overwhelmed, in presence of overnutrition and the diabetogenic hormones. The islet tissue of dogs, cats and man do not hypertrophy under these circumstances and in them obesity is more diabetogenic.

Hetherington[14] ten years ago proved that injury to the hypothalamus could be followed by obesity and that this condition was unrelated to pituitary lesions. For one hundred years the so-called Fröhlich syndrome had been confused with the disease of the pituitary. Brobeck, Tefferman et al [4,5,6,7,9] in Long's laboratory have studied the relation of this form of obesity to carbohydrate metabolism. They brought out the following facts: Hypothalamic obesity is due to hyperphagia. The rats ate continuously and gained rapidly. No other explanation of the gain in weight except increased caloric intake was found. The basal metabolism was normal. The R.Q. of the obese rats was well above one, proving that carbohydrate was very rapidly converted to fat. The Yale observers proved that the conversion of carbohydrate to fat was an acquired metabolic adjustment to stuffing the body with carbohydrate and forcing the organism to store it in a limited period of time. Normal rats, they found, could be trained to eat a whole day's food in an hour's time. These trained rats, like the hypothalamic ones, converted carbohydrate rapidly to fat. Furthermore, it was shown that the conversion of carbohydrate to fat took place in both adipose tissue, as well as the liver, but the trained rats had higher amounts of fat in the liver than the controls. Partially depancreatectomized rats are not diabetic but if such animals are made obese by producing hypothalamic lesions, they become so. Fasted, the glycosuria and hyperglycemia cease, only to return when the animal is allowed to stuff himself with food. One hypothalamic rat became permanently diabetic without pancreatectomy and two others showed diabetic blood sugar curves. Ranson[23] has produced hypothalamic obesity in a monkey.

The work at Yale suggests that in man large meals habitually eaten force the rapid conversion

of carbohydrate to fat. The beta cells of the islets are called upon to produce large amounts of insulin in short periods of time. In the course of time the exhaustion of the islet cells occurs. Fat formation is a means of controlling hyperglycemia just as is the formation of glycogen.

The third form of experimental obesity of great interest is the genetically produced mice.[15] A strain called "V" was crossed with one called "Fuzzy" and of the litter mates approximately 20 per cent overate and rapidly became obese. The gene is recessive and unfortunately the obese animals are sterile. Mayer et al[2,12,17,18,19] have studied these animals. They are diabetic. The blood sugar is high and cannot be reduced by insulin, in fact several times the lethal dose is well tolerated. Nevertheless the blood sugar falls promptly when the animal is starved. The basal metabolism is very low, over 40 per cent below controls. But the thyroid gland is microscopically normal. The islets are hypertrophied and are more numerous than normal. The beta cells are normal. The liver contains only a trace of stainable glycogen in contrast to the abundance of glycogen stained in the livers of controlled animals. Guggenheim and Mayer[12] injected these animals with radio-active acetate and pyruvate and showed that these substances were stored rather than oxidized.

These mice are probably diabetic because they cannot form liver-glycogen. They apparently do not suffer from insulin deficiency either absolute or relative, judging from the stained pancreas preparations. In two respects the animals suggest an explanation of the insulin-resistant obese diabetic. If such diabetics had difficulty in forming liver glycogen as the mice do, we would have an explanation of their insulin resistance. Secondly, the hereditary combination of obesity and diabetes makes one wonder whether human obesity is a hereditary trait accompanying diabetes. Such may be the case, but as yet there is no evidence to prove it.

Statistical Data Bearing on the Obesity-Diabetes Relationship*

Death rates may or may not reflect morbidity rates. If diabetes death rates are truly and reliably reported by the medical profession, and if the old fifth Revision of Causes of Death were used, there would be a better relationship between mortality and morbidity. Granted that mortality statistics only crudely reflect morbidity rates, they are worth studying to determine if the state of nutrition of a nation is reflected in the diabetes mortality rate.

Before doing so, one must keep in mind at least three conditions that have profound effects on diabetes mortality rates: (1) The rules in force governing the classification of causes of death; (2) The availability and quality of medical services; (3) The age of the population and the sex ratio, especially over the age of forty-five. Dublin and Marks[10] compare the mortality rates of the states as they appear under the fifth and sixth Revisions of the International List of Causes of Death. The rate classified by the sixth Revision varies from less than .30 to .80 of the fifth Revision. The ratio variation probably illustrates the variation in reporting of diabetes by physicians and the availability of medical service. The sixth Revision allows the physicians' opinions more weight and leaves to them the decision whether the complications of diabetes which kill are to be given preference over diabetes as causes of death. These data suggest that in the United States rates which do not vary more than 50 per cent are not significant for reasons stated above.

One of the interesting features presented by Dublin and Marks[10] is the variation of death rates in the large cities of the United States. They present the rates of the fourteen largest cities. Rates (1948) varied from New York with 48.2 to San Francisco with 26.5. Also they show that in nearly thirty years in some cities the diabetes death rates has doubled and in others it has increased very little. The explanation of this variation is the shift of population as regards age and sex. The greater numbers of those past fifty years, and especially if the city contains many older women, the higher will be the diabetic death rate.

The discussion of diabetes death rates in this country is to emphasize the importance of the factors discussed, namely, the availability and quality of medical service, the laws in force governing the classification of causes of death and the age and sex ratio of populations. If in one country such as the United States, morbidity rates vary so widely, one must be very cautious indeed in comparing those of various nationalities. Never-

*The author is indebted to Mr. Herbert Marks, Metropolitan Life Insurance Company, for his criticism and help.

theless, we know that war has brought about large changes in the levels of nutrition in the several countries of Europe. If the level of nutrition effects diabetes morbidity rates, as we think it does, there should be changes in the rates in Europe corresponding to changes in the national level of nutrition. Unfortunately vital statistics are not reliable for just the time one wants most, for instance during 1942 to 1945. However, we have reports from physicians that can be relied on.

During 1941-43 there was starvation in Greece with calorie intakes of approximately 1,000 calories. The mortality from diabetes was almost nil.[30] In the Scandinavian countries H. Malmros[24] reported that during 1935-45 the mortality rate from diabetes reached the lowest level of the decade and the clinic cases dropped to 1,880 (twenty-two clinics) and then rose to 2,640 in 1946. The same trend was seen in the Netherlands, England and Germany.

Diabetes death rates in most European countries, as shown by Dublin and Marks,[10] are dropping. They compare the rates of 1928 and 1938 with those of 1948. Whereas, the rates in the case of United States, Canada, Australia, New Zealand are rising, those of most countries of Europe are falling. The relative rates of some of the nations given by Dublin and Marks[10] are:

U.S.A.	26.4	Germany	7.7
Canada	20.3	England & Wales	*7.6
New Zealand	20.1	France	7.3
Australia	18.8	Netherlands	7.4
Denmark	16.6	Italy	6.9
Belgium	15.9	Sweden	6.8
Norway	12.3	Finland	5.9
Switzerland	11.2	Austria	5.6

*Not comparable.

These authors say: "Unfortunately the facts on which one can judge the significance of these sharp declines in diabetes death rates in Europe are not available. Nevertheless there is ground for the belief that the trend of diabetes mortality rates affords a practical demonstration of *diabetes control* (italics ours) on a large scale by enforced dietary restriction.

"In contrast countries which have experienced an increase or little change in diabetes mortality, such as United States, Canada, Australia and New Zealand, have enjoyed an abundance of food, so that in part, at least, their death rates reflect high living standards and high food intake." We are convinced that if data of the number of people 20 per cent overweight were available, a clear-cut relationship to diabetes would be found.

Discussion and Summary

There is good physiological-pathological facts to support the thesis that overnutrition throws enough strain on the insulin apparatus to cause it to break down as either an actual or relative insulin deficiency. This is true of the cat, dog or man. From a clinical point of view, reducing obesity is a therapeutic means in some cases as effective as insulin. The fact that obesity precedes the onset of diabetes in 85 per cent of individuals past forty years of age, and the further fact that of all pathologically obese individuals (20 per cent above normal weight) one out of five is diabetic, all these clinical facts support the role of obesity as of great etiological importance.

The evidence from the study of experimental obesity proves that there is a biochemical pathological relationship between obesity and diabetes. Hypothalamic obesity has been shown to place a strain on the insulin-producing cells, and diabetes has developed in monkey, rat and man. Genetic obesity in mice with diabetes is of interest because of the block existing to the formation of liver glycogen. Newburgh in 1939 proposed that in the case of the elderly obese diabetic just such a block existed. Further interest in these animals lies in the fact that the insulin apparatus seems to be, at least histologically, in better than normal condition and yet diabetes exists. One waits with interest the determination of insulin in the pancreases of these animals. This new form of obese-diabetic animal will throw fresh light on the understanding of obesity and diabetes and their relationship.

Granted that statistics cannot be taken at their face value and require careful interpretation, nevertheless, one is inevitably attracted to their study because they can tell the story of vast experiments in human nutrition. In our generation wars have brought well nourished nations to starvation followed by resuscitation. The evidence seems to show that the mortality and morbidity rates decrease with undernutrition and increase with overnutrition. Those nations which have low levels of nutrition have low diabetes mortality rates, while prosperous nations with hypernutrition and resulting high incidence of pathological obesity have very high rates.

Taking the evidence presented one is forced to conclude that obesity is as important as heredity in the etiology of diabetes. True, many (one third, all ages) diabetics are not overweight, but the evidence of war undernutrition proves overnutrition has a greater influence on diabetes mortality than heredity. Perhaps one would better say that the hereditary diabetes, because it is recessive, will not become apparent unless overnutrition be present, at least in the greater majority of cases, and particularly in the later years of life.

How can the chronic state of overnutrition in the United States be reduced to normal level? First, by more research to reveal the nature of hunger, appetite and satiety in the experimental animal and especially in man. Secondly, an educational campaign based on prevention rather than cure. Such a campaign could interest health agencies such as The American Diabetes Association and other organizations concerned with national health as it is affected by overnutrition.

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Obesity: Clinical Observations

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AS A RESULT of clinical observations certain impressions have been made concerning the problem of obesity. It is commonly accepted that obesity is the result of so-called "luxus" consumption of food that is required for energy requirements. The statement that fat only comes from food is true but why do some individuals who put on weight easily find it extremely difficult to diet, and regain the weight that was lost as soon as dieting is halted?

There is no question but that heredity plays a large role in the production of obesity. One needs but take the family history of obese individuals to determine the hereditary factor. There is no reason to believe that fat tissue reacts differently to hereditary factors than do the bones, muscles or other tissues. Furthermore identical twins in different environments react the same to food intake.

It is agreed that the obese individuals consume an excess amount of food. But what gives these individuals such large appetites? Listening to these obese individuals one is impressed by the intense craving for food simulating in a measure the craving for alcohol. All the good resolutions made to follow a reduction diet are so frequently thrown overboard when the craving for food overtakes them and they soon return to the so-called "knife and fork league." Over the period of years I have watched and listened to obese individuals give their reasons for overeating. Of course most of them deny they do this, some are honest about it and frankly say they overeat but cannot help themselves.

Craving for food in obese individuals, is in a large measure, due to inheritance. They inherit an increased appetite. Certain observations make me believe that there is a glandular background for this craving. This is not offered as an excuse for obesity since it is agreed that fat comes only from food. It is said hiding behind a glandular explanation eases the obese individual's conscience so that in this way he justifies his great appetite and food consumption.

From what I have been able to observe the explanation for the craving could be found in an overactive pituitary gland and the neighboring hypothalamus which act as a pacemaker for carbohydrate metabolism. The overactivity of the pituitary-hypothalamic system results in stimulation of the pancreatic islet cells with production of insulin, this in turn lowers the blood sugar and activation of the appetite center (probably in the hypothalamus) resulting in a craving for food. It is similar to the parental injection of insulin which results in hunger. As we know when the blood sugar level is lowered by insulin one of the first symptoms noticed by the patient is a craving for food. Such craving is not to be denied and nature creates this craving to overcome the hypoglycemia. Overdosage of insulin results in marked mental disturbance with confusion, irritability, extreme restlessness, and mania. If the blood sugar is reduced to very low levels convulsions may be induced. It is of interest that the convulsions are a protective mechanism to release glycogen from the muscles and thus overcome the hypoglycemia and convulsions.

The ability to induce obese children to diet has been, as a general rule, a dismal failure in my experience. Even with anorexic drugs I have had no real success. When the drugs are discontinued the same craving for food returns often with a vengeance so that the weight returns in a hurry and not infrequently exceeds the pre-drug, pre-dieting period. Unfortunately some obese persons consume the diet plus the regular meal.

There are some strong willed obese patients who are determined to lose weight. Being humorously referred to as "fatty," "tubby" and other such names goads some of them to strenuous dieting with real success. Children are particularly cruel to one another in that having no inhibitions they nickname their playmates with scurrilous appellations. Their nicknames are also applied to crippled and deformed children. Of course these nicknames are considered harmless by the children but do make a deep impression on the recipients. Women are more apt to follow a diet than men since their attractiveness is often lost by obesity. Of course psychological factors enter into dieting and when the obese individual does lose a few

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pounds he in encouraged to continue the diet, particularly if his health improves.

The intense interest in overcoming obesity is seen daily in magazines, especially those devoted to women's fashions. Every type of diet has been advocated and all fall by the wayside. The Hollywood, banana, high protein, yogurt, and the countless variations each have their champions and each have their day in the limelight only to sink into oblivion within a short time. The individual returns to his ancestral type until a new diet sponsored by bridge club friends is given a trial. One can't help but feel that Shakespeare knew body build and character when he said—

"Let me have men about me that are fat:
"Sleek-headed men, and such as sleep o'nights:
Yond 'Cassius has a lean and hungry look;
He thinks too much: such men are dangerous."

Kretchmer[1] in more recent times also pegged the various mental types in his book *Body Build and Character*. He showed that the greatest percentage of fat people if they developed insanity were of the maniac-depressive type whereas the thin, slender type developed schizophrenia—the fat type committed suicide (seen in the Germanic races) and the lean type committed homicide.

The endocrine system is responsible in a large measure for body build, that is individuals inherit their glandular activity and the target tissues reaction to glandular secretions. That the pituitary plays a role in obesity is seen in pituitary basophilism and acromegaly. In both conditions, the sugar tolerance is low. Furthermore, anterior pituitary extract can produce a permanent diabetes mellitus. Of interest is the fact that Cortisone, ACTH and Testosterone usually increase the appetite with a gain in weight and a lowered sugar tolerance.

It is known that hypothalamic lesions such as P. E. Smith[3] produced in rats by the injection of chromic acid resulted in marked obesity whereas the control rats on the same diet did not behave in this manner. Furthermore the individuals who suffered from encephalitis lethargica frequently became extremely obese much like the rats with hypothalamic lesions. It is well known that infections, such as measles, scarlet fever, and others may be followed by obesity. The fact that there is frequently a spurt in growth following these infections would indicate that the hypothalamic-hypophyseal mechanism is activated. Likewise the removal of tonsils activates the mechanism so that there is an increase in height and weight in predisposed individuals, that is, if by hereditary background they are to become obese, infection, puberty, tonsillectomy may act as the priming mechanism. It is readily understandable that the temperature regulating mechanism of the hypothalamus is activated by infection and also by conditions of stress which Selye has brought into such great prominence. This may lead to obesity. One may also mention the changes in this mechanism at the menopause and pregnancy which frequently set off the priming mechanism for obesity. So often individuals complain of the "middle-aged spread" and it is very distressing. They follow the hereditary pattern at this time and the menopausal symptoms vary with individuals. Some have absolutely no menopausal symptoms such as hot flashes, mental depression, or paresthesias, while others suffer a great deal.

The close relationship between fat metabolism and the hypothalamic-hypophyseal mechanism is seen in Simmond's disease or pituitary cachexia. In this disease there is practically a complete disappearance of fat from the body and the individual presents a picture of extreme emaciation. A clinical condition simulating it in practically all its characteristics is anorexia nervosa which presents a difficult diagnostic problem. This condition is due to psychic causes so that the individual loses the appetite almost completely. Some who are under stress or mentally depressed, may eat excessively and still lose weight and when the offending cause is removed, they again gain weight rapidly.

The fallacy of giving thyroid to an individual because he is obese has been emphasized.[2] It has been pointed out that few individuals are really suffering from hypothyroid obesity. Furthermore the basal metabolic rate is not the diagnostic criterion for these individuals. Some physicians are prone to treat the metabolic rate instead of the patient. It is known that pituitary-hypothalamic disturbances produce a lowering of the basal metabolic rate. Giving obese children thyroid in fairly large doses such as one to three grains for reducing purposes is not without danger for prolonged overdosage may result in medicated hyperthyroidism with a *negative calcium balance*. This results in osteoporosis, such as seen in thyreogenic

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Control of the Diabetic

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DESPITE the advances in our knowledge of diabetes, the average physician is still beset with some doubts as to how to proceed with the management of the patient with this disease. One of the difficulties arises from the overemphasis on the chemical aspects of the disturbed metabolism, with little consideration for the patient who must adapt himself to a radical change in his mode of living. Others are concerned with the planning of a proper diet; when to give insulin and the kind to be used; how often to see the patient and the minimal tests to be done; how rigidly to maintain control; and what measures to take when the daily schedule of the patient is disturbed by acute illness.

Before embarking on the technical aspects of effective control it is important to recognize that the patient is usually a reluctant, skeptical and frightened person who is faced with what to him is a radical change in his former method of living. Often his discomforts are few and not immediately threatening so that he tends to consider them unworthy of so much corrective effort. It is thus no small task to convince him to change his ways and to develop an objective approach to the solution of his problem. Painting a threatening picture in full color of all the dire consequences that may befall him is to start off on the wrong foot. Adding fear paralyzes positive action and may drive the patient into hiding or into the hands of the charlatan.

A friendly approach during which there is an understandable explanation of the problem will make the way easier for both doctor and patient. It should generate enthusiasm, for this is a disease that offers many immediately evident gains against the few remote possibilities of damage. Unless the patient is properly convinced in the beginning, honest co-operation will be lacking and what should be an open joint effort degenerates into a game of "fool the doctor."

Furthermore it must be impressed on the patient that while the diet is the sheet-anchor of treatment this means only that the quantity, not necessarily the quality, of the food he eats is to be modified, and before arranging a suitable diet it is important to have an exact dietary history so that the eating habits and tastes may be learned. At this point it is useful for the doctor to classify, at least roughly, the type of diabetes that presents. Juvenile diabetes and that of the aged are two different diseases. In the former there is primarily a lack of insulin, in the latter there is slowing in the cycle of carbohydrate metabolism and possibly some impairment in resorption and excretion. The middle-aged diabetic, while producing insulin at a normal rate, often develops his disease after a period of obesity and has varying degrees of liver damage.

Arranging the Diet

Shall one start with a diet and insulin at once or with diet alone? In the middle-aged and older diabetic it is wiser to temporize as to insulin while in the junior diabetic it is a foregone conclusion that insulin will be needed. In any case, unless the situation is urgent, a trial of dietotherapy alone is reasonable, if only to emphasize its basic importance.

Calculation of the diet should be made with respect to the needs, not the wants, of the patient. At this point it must be decided by the doctor whether he will allow his patient to eat what he wants, taking up the slack with insulin, or whether he will insist on subjugating the patient's tastes and having him adhere to a fixed diet to meet his needs. The latter method is less troublesome in the long run since it allows but one variable factor to enter, that of insulin, if it is needed. The first method introduces two variables, permits two people to tamper with the controls and results in inadequate, irregular, unreliable control.

Calculation of the diet formula is relatively simple. The total daily caloric need is first determined by taking into account the age, sex, optimal weight and occupation. The adult needs 30 calories per kilogram; children from fourteen to seventeen years, 60 to 40 calories; those from ten to thirteen, 70 to 60 calories; from six to nine, 80 to 70 calories; and from two to five, 90 to 80 calories. Protein requirements average 1 gm. per kilogram for the adult, and 2 to 4 gm. for infants and children. The trend of late has been towards higher protein increments for the more severe diabetic at the expense of the carbohydrate fraction since the former provides carbohydrate at a slower more uniform rate.

The carbohydrate allowance varies from 2 to 3 gm. per kilogram, while the balance of the caloric requirement is met by fat with its value of 9 calories to the gram. Thus the diet prescription for a man weighing 150 pounds (70 kg.) will provide 2,100 calories from 70 gm. protein, 140 gm. carbohydrate and 140 gm. fat.

Translating the diet prescription into a palatable menu probably constitutes the most troublesome obstacle for both patient and physician. Here the individual's tastes, dietary habits, hours of work and family co-operation must be accorded consideration. The problem can probably be handled best with the aid of a hospital dietitian. Lacking this facility, simple menus for most dietary prescriptions are available in text books on diabetes and are quite satisfactory in most instances. But instruction must be clear-cut with no doubts left in the patient's mind as to food values, substitutions and the need for strict adherence to the diet. The reluctance of the patient to change his former habits and the vagueness of the advice offered by the physician promote carelessness in carrying out this most important single aspect of successful management. This is the keystone of the whole structure and the patient must be given complete and detailed understanding of what the diet means to him.

A method that may be used to drive the lesson home is to start the diabetic who is not in acidosis on the following diet that allows 112 gm. carbohydrate, 64 gm. protein and 32 gm. fat yielding 1,000 calories:

Breakfast
- 1 serving fruit
- 1 egg
- ½ slice bread
- ½ tsp. butter or margarine
- coffee or tea

Lunch
- 1 cup broth or bouillon
- 1 average serving lean meat, fish, fowl or cheese
- 4 servings vegetables
- 1 serving fruit
- ½ slice bread
- ½ tsp. butter or margarine
- 1 cup skim milk

Dinner
- 1 cup broth or bouillon
- 1 average serving lean meat, fish, fowl or cheese
- 2 servings vegetables
- 1 slice bread
- ½ tsp. butter or margarine
- coffee or tea

This serves several purposes. By underfeeding, it promotes weight reduction when this is necessary and effects better utilization of the ingested food. It is often surprising to find the severe diabetic who is undernourished becoming aglycosuric and even gaining some weight under this regime. Furthermore it introduces an abrupt break with former eating habits and teaches tolerance for hunger. Instruction in urinalysis should be given at this time and the patient asked to return at weekly intervals when adjustments in the diet are to be made and the need for insulin determined.

In the obese, weight loss is desired so no increase in the diet should be made. The use of insulin in these patients should be deferred as long as possible to allow the effect of weight reduction on the diabetes to assert itself.

A waiting game is also indicated in the aged for these do not require a high caloric intake and rapid elimination of the glycosuria is not always urgent.

In the juvenile, brittle, or middle-aged undernourished diabetic, however, an optimal diet should be reached as soon as possible and insulin added to assist in its utilization. Here, as well as in the aged, one may start with a dose of 10 to 15 units of protamine zinc insulin before breakfast, adding 5 units daily at weekly intervals until the glycosuria has cleared. In the severe diabetic this goal can be reached only occasionally and it will be necessary to add crystallin or globin insulin later in the day when the glycosuria is most pronounced. Adjustments in dosage of protamine zinc insulin should be made according to the glycosuria in the prebreakfast urine specimen. A continuing negative finding indicates a reduction in the dose by 4 to 5 units while persisting glycosuria calls for an increase by a similar amount.

When more than one type of insulin is necessary urine specimens are best checked on arising, before lunch, dinner and at bedtime and the shorter acting insulin administered in advance of the midday or early evening glycosuria. Here again changes up or down should be made in increments of 4 to 5 units and rarely oftener than once a week. When effective doses of slow and fast insulin have been established the two may be combined by administering the total unitage as a mixture of 2 parts of crystalline and 1 part protamine zinc or as NPH insulin.

The patient should be seen at weekly intervals during the period of adjusting the diet and ininsulin. Once this has been accomplished, the interval may be lengthened to four weeks and even

longer, depending on the degree of understanding and co-operation attained. At these visits the patient should report on his well-being and present his daily record of urinary findings. If his weight remains at the optimal level, the midafternoon blood sugar value is not over 150 mg., and he has been reasonably aglycosuric, he may be considered well controlled and no change need be made in his program. Weight loss alone may mean insufficient caloric intake. When combined with persistent glycosuria insulin dosage is inadequate. Weight gain with glycosuria generally means extra food is being taken and it is best not to increase the insulin dosage but to insist on strict adherence to the prescribed diet. It is unwise to charge the patient with cheating or to engage in prolonged arguments to prove his errors. The findings should be thoroughly explained and allowed to speak for themselves. Co-operative effort is in the final analysis, the only way in which adequate control may be attained.

What is Adequate Control?

What constitutes adequate control? This question has been tossed around considerably in the past several years and while at the moment the conservative view of strict aglycosuria and normoglycemia appears to prevail, it must be admitted that this is more wishful than practical. The liberal view that allows an unrestricted diet with a moderate dosage of insulin and has scant regard for the amount of glycosuria so long as the patient gains or holds his weight and feels well, is altogether too practical. It has the doubtful advantage of relieving both patient and doctor from concern about the disease but only differs from the old time empirical management of diabetes by substituting a little insulin for the "go easy on the starches and sugars" admonition. Nevertheless it has brought the issue into the open and has demonstrated that, however desirable, rigid control is an ideal more talked about than accomplished.

One wonders whether the effort to achieve perfection is not too costly in view of the gains made; whether the personality of the juvenile diabetic for whom perfect chemical control is most ardently sought will not be warped in the devotion to so demanding a cause. If diabetes meant only an insufficient insulin supply there would be no problem. But variable factors, more numerous in the young person, make it exceedingly difficult, if not impossible, to achieve and maintain complete aglycosuria and normoglycemia.

Too rigid control also introduces frequent episodes of hypoglycemia which, besides fear and discouragement, may cause damage to the brain and diminution in the coronary circulation. Generally, with a suitable restricted diet as a base, and allowance made for the hypoglycemic effect of muscular activity, enough insulin should be administered to keep the post-prandial urine as nearly sugar free as possible and the post-prandial blood sugar level no higher than 150-160 mg. per cent.

Frequency of Observations

As mentioned earlier, visits to the doctor should be made weekly until the diet has been established and insulin dosage determined. After that the interval may be lengthened to from four to six weeks. The patient should bring a record of his daily urinalyses to demonstrate adherence to the diet and the adequacy of insulin dosage. An honestly kept record will disclose much of value both to patient and doctor. Among other things it will point up periods of emotional strain and dietary deviations when control is lost, thus offering opportunity for discussion of the problems arising since the last visit.

A record of the weight and blood pressure and the state of the eye grounds and peripheral vascular circlulation complete the essential clinical observations.

Factors That Disturb Control

Occasionally the patient who is well controlled has an acute upper respiratory or other type of infection with fever, or he suffers a gastrointestinal upset with nausea and vomiting or diarrhea during which his dietary schedule is disrupted. In such instances it is important to continue insulin even though food is not being taken and the patient must be assured that there is no risk in following this advice. Fluids, particularly water, must be taken until the doctor is reached and better arrangements can be made to control the disturbance. Prompt medical attention cannot be emphasized too strongly for it is here that diabetic acidosis and coma have their beginning.

Summary

Control of the diabetic is best achieved through a smoothly functioning partnership between physician and patient, the former as director and guide and the latter as the field worker. A thorough knowledge of the aims and objectives must be instilled in the patient and enthusiasm constantly stimulated to override any discouraging obstacles as they arise.

An adequate, readily available diet that is adjustable to meet the variables in the patient's everyday existence is of basic importance.

Sufficient insulin of suitable type should be supplied when indicated and the syringe used, as well as the dose, should be checked by the physician. Regular meetings between patient and doctor should be arranged to determine the effectiveness of the program and to discuss jointly problems of management.

Criteria for adequate control should be set up eliminating extremes in reaction so that the patient's daily pattern will simulate closely that of the non-diabetic.

Precautions to be observed when the customary routine is disrupted by illness must be clearly defined.

Chemical control alone is not enough. The patient is not a test tube and his metabolic problem requires personal study and mutual understanding.

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OBESITY: CLINICAL OBSERVATIONS

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osteoporosis. A consequence of this, since these individuals are heavy, is a curvature of the spine and if medication is prolonged irreparable damage is done.

Many obese patients, after varying periods of trials with various diets develop their own philosophy such as, "Let the chips fall where they may," or some who are more forceful say: "To hell with it" and merrily go on their Fallstaffian way. Now and then one is encouraged by the weight loss achieved by some obese patients with determination and the help of anorexic drugs. An understanding physician or psychiatrist is of assistance in these cases and some patients continue their diet indefinitely. More frequently, however, the larger number who do not diet and, of course do not lose weight, put a damper on the physician's enthusiasm. All in all obesity is a problem that is difficult to treat and regardless of what viewpoint one takes a reduction diet is still the only way to lose weight. One cannot help but sympathize with the individuals who say "would that this too too solid flesh would melt."

Summary

Obesity is the result of luxus consumption of food but the view is taken that heredity plays a large role in the production of obesity. Fat tissue reacts no differently to hereditary factors than do other tissues. It is assumed that the excess food intake is brought about by a large appetite which may well be due to hereditary overactivity of the pituitary-hypothalamic system. A lowered blood sugar similar to that seen in overdosage of insulin, may be the factor producing the large appetite.

The pituitary-hypothalamic activity with resultant stimulation of the pancreatic islet cells could produce hypoglycemia with resultant hunger.

The treatment for obesity regardless of the cause still remains a low calorie diet.

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Diabetic Coma and its Treatment

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IT IS THE purpose of this discussion to provide a brief clinical review of the treatment of diabetic acidosis and coma. Such aspects of the problem as symptomatology, diagnosis, frequency, mortality rates, et cetera, will not be considered. Considerable emphasis will be given to certain recent advances in therapy which have emerged from a better understanding of the physiologic processes involved in the development of this state of acidosis. Many patients, of course, will recover from diabetic coma in spite of rather haphazard treatment with saline solutions and insulin. However, there is little doubt that many other patients, who either do not survive or develop serious complications during treatment, could be spared if more consideration were given to some of the finer details of management.

The initiating, primary cause of the ketonemic acidosis in diabetics is the rather abrupt development of a serious impairment of the tissue to utilize glucose to satisfy energy requirements. This marks the extreme diabetic state and initiates a whole series of metabolic events which finally culminate in coma. The precise reason for the sudden deterioration in ability to utilize carbohydrate is not known. However, intercurrent infections or trauma, or withdrawal of insulin often precipitates the development of this state. Because of its occurrence much larger amounts of insulin than normally required are necessary to effect accelerated utilization of glucose. Thus a state of relative insulin ineffectiveness exists. Some of the complicated consequences that lead to the development of, and characterize diabetic coma are outlined below. Treatment is designed to cause a prompt cessation of the progression of these events and to reverse many of the processes, so that normal composition and function of body fluids and tissues are attained.

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1. A serious inability to utilize glucose; characterized by a relative insulin ineffectiveness.
2. Continual rapid breakdown and depletion of liver glycogen——→ hyperglycemia——→ glycosuria with diuresis of water, sodium and chloride ——→ dehydration, thirst, et cetera.
3. Increased ketogenesis——→ ketonemia and ketonuria.
4. Acidosis from ketonemia——→ low serum bicarbonate, low pH, hyperventilation, vomiting, insulin ineffectiveness, increased breakdown of tissue, cerebral anoxia.
5. Increased breakdown and altered composition of tissue——→ variable losses of nitrogen, potassium, magnesium, phosphate, et cetera.
6. Body electrolytes lost by 2 and 5 above. Since these losses are accompanied by large but variable losses of water, the actual concentrations of these electrolytes may not be diminished in spite of large total losses.
7. Dehydration, indirectly because of electrolyte losses and directly because of water losses through lungs, skin and kidneys. Water, chloride and potassium losses from vomiting. Dehydration and NaCl depletion——→ hemoconcentration, vomiting, fall in blood volume and blood pressure, shock, anuria and tissue anoxia.
8. Anoxia and ketonemia——→ coma.

More detailed discussions of some of these interrelated events can be found elsewhere. For example, Butler[1] has outlined some of the many factors which may be operative in creating a state of insulin ineffectiveness and has admirably defined the deficits of water and electrolyte that may be sustained. Peters[12] has reviewed the problem of starvation diabetes and the mechanisms responsible for utilization of glucose. Danowski, Winkler and Peters[3] have discussed the problem of peripheral circulatory failure and salt depletion. Holler,[8] Danowski[2] and others[13,14] have pointed out the importance of altered potassium and phosphate metabolism in diabetic coma. Kety[9] and Guest[7] have reviewed the effects of acidoses *per se* on cerebral function, insulin effectiveness and the composition of body tissue.

General Comments on Treatment

Objectives.—With the essential characteristics of diabetic coma in mind, the objectives of treatment are readily apparent and are as follows:

1. To transfer the combustion of fat to carbo-

hydrate as rapidly as possible. Insulin, in large amounts, is the most important therapeutic agent to achieve this end. The early use of fructose also may prove to be important. When the level of the blood sugar falls, adequate supplies of glucose are also required.

2. To restore normal composition, in concentration and total amount of the extracellular and intracellular components. This is accomplished by appropriate use of sodium chloride in water, of alkaline solutions and of other agents such as potassium and phosphate. Complete nutritional recovery does not occur until the patient begins to eat.

3. To support the circulation. This is achieved by prompt use of saline solutions and by appropriate use of colloidal solutions (plasma or whole blood).

5. Finally, when therapeutic exertions are directed at one phase of the problem, it is important that harmful effects of therapy are not induced in other ways. Rules of therapy must be flexible.

Initial Evaluation and Laboratory Tests.—The history and physical examination will usually indicate the precipitating cause of the coma, the duration and severity of the disturbance and the degree of dehydration and acidosis. Difficulties in therapy can be anticipated if the patient has a serious, complicating disease and/or if the patient has been ill for more than a day before admission.

As soon as possible after admission certain procedures should be more or less routinely carried out. It is of great importance that an accurate record is kept during the entire course of therapy. It is imperative to know, at any time during treatment, the amounts and nature of fluids which have been given, the current results of laboratory tests of blood and urine, the amounts of insulin administered, the blood pressure and condition of the patient. These records must be kept on a special "treatment-sheet" or "flow-sheet"; only confusion will result from data separately recorded on the usual hospital "progress notes," "laboratory sheets" and "nurse's notes."

The determination of the blood glucose and the glucose, acetone and diacetic acid of the urine aid in substantiating the diagnosis; their subsequent determinations at frequent intervals are essential in following the course of treatment. In fact, while other laboratory tests give important information, determinations of the course of the blood and urine glucose and urinary ketone-acids are tests which are the most applicable, generally available and informative in most cases. Urine tests for glucose and ketone-acids should be carried out at hourly intervals; blood sugar determinations at about four-hour intervals. The dangers of hypoglycemic reactions during the course of treatment are discussed under the section on insulin therapy.

Initial and serial determinations of the serum bicarbonate are less helpful as a guide to therapy than often assumed. If the respiratory center is not depressed the initial CO_2 concentration provides a fairly good index of the severity of the initial metabolic acidosis; however, careful appraisal of the patients' clinical progress, the response of the glucose in the blood and urine, the rate of disappearance of ketone-acids, evidences of other deficiencies (e.g., potassium) are much more important than subsequent determinations of the serum bicarbonate.

The initial concentrations of sodium and chloride in serum give little information regarding total needs of these electrolytes (see section of parenteral fluid therapy). Their determination later during the course of treatment aids in the appraisal of the appropriateness of previous fluid therapy.

Since acidosis, dehydration and starvation alter tissue composition and accelerate tissue catabolism, the products of these changes (potassium, phosphate, nitrogen, et cetera) must be excreted by the kidneys. Elevated initial concentrations of these indicate renal decompensation. Further, since the concentrations of potassium and phosphate in plasma invariably fall during treatment when carbohydrate utilization is accelerated and intracellular constituents are reconstituted, their initial and subsequent determination lends precision to therapy. The serum potassium can be rapidly determined by the flame photometer and a low value always indicates potassium deficiency. The use of the electrocardiogram, and other clinical signs in the evaluation of potassium deficits or excesses has been well discussed elsewhere.[4,5,6]

In the author's experience the routine use of gastric aspiration and lavage of patients in diabetic coma is, at best, an unnecessary maneuver. In fact, the further removal of gastric fluid from a patient already deficient in water and salt does not seem to be good or reasonable treatment. Only

very rarely does serious atony and distension of the stomach occur. Depletion of sodium and also of potassium, from any cause, usually leads to atony of the gastrointestinal tract and vomiting. In diabetic coma vomiting almost invariably promptly ceases as soon as therapy with saline solutions and insulin is begun. Oral feedings should not be attempted until nausea has completely abated. Should vomiting recur, oral feedings should be immediately discontinued and resumed only after several more hours of treatment have elapsed.

Insulin Therapy

Different schemes of insulin therapy in diabetic coma have been suggested. Some recommend a very large initial dose (300 units or more); others suggest more moderate amounts to be administered at more frequent intervals. There is no proof that these slight differences in technique appreciably influence the outcome. All are agreed that when the diagnosis of diabetic coma is made, therapy with insulin should begin as promptly as possible and that large amounts usually will be required to effect accelerated utilization of glucose. The total amount which will be ultimately required cannot be accurately predicted at the beginning to therapy; this amount will depend on a variety of factors (known and unknown) operative at the time, as well as on the initial severity of the disturbance.

A rather simple scheme of proven value in adults is to administer 40 to 50 units of regular (crystalline) insulin intramuscularly and a similar amount intravenously in the first intravenous infusion. At hourly intervals thereafter similar amounts are given intramuscularly. When the blood sugar definitely begins to fall or the glycosuria diminishes or disappears, the administration of insulin should be temporarily discontinued (i.e., usually for three to four hours) and the administration of 5 per cent glucose in water or saline begun. It seems to the author that more errors in therapy occur at this point than at any other time. Often, through negligence or fear of administering glucose, the patient is allowed to develop a hypoglycemic reaction. Or, on the other hand, the insulin is discontinued for too long an interval, thus permitting its effects to become dissipated and allowing the formation of ketone-acids again to increase. Indeed, at this crucial point the utilization of carbohydrate has, at least in part, been restored; yet, the presence of short-acting insulin and its salutory effects must not be allowed to disappear. Therefore, after the administration of glucose solutions has begun, moderate amounts of insulin (15 to 30 units) should again be given every three to four hours until ketonuria has disappeared and virtual recovery has occurred.

Any fears regarding the use of glucose at this later time in therapy are unfounded. The administration of glucose will prevent the occurrence of hypoglycemic reactions, some of which may be severe. Hypoglycemia should be scrupulously avoided since this state (carbohydrate starvation) again sets in motion many serious, undesirable effects, i.e., depletion of glycogen stores in the liver, accelerated combustion of fat and subsequent intolerance to carbohydrate. These complications are those which therapy was originally designed to correct. Not infrequently, patients, partially recovered from their ketosis, develop further hyperglycemia and ketosis consequent upon a hypoglycemic episode.

It should be emphasized that all orders for insulin should be "stat" orders, given by the attending physician according to the total information available at the time. In this emergency orders should never be given several hours in advance. Also, it seems that the repeated administration of smaller amounts of insulin provides a more flexible technique than the administration of a very large, single, initial dose. The former method provides an overlapping of the effects of each dose and thus a continuous action. The use of a very large initial dose leads to uncertainties as to when, and how much insulin should be subsequently given. Also, a precipitous, unchecked fall in the blood glucose will lead to a severe insulin reaction with its attendant deleterious consequences.

Parenteral Fluid Therapy

General Comments. Fluid therapy only during the first twenty-four hours will be considered. Usually by this time clinical recovery has largely taken place and oral feedings are tolerated. Complete chemical or nutritional recovery with repletion of destroyed and damaged body tissue undoubtedly requires several days.

It is not possible to calculate by any preliminary laboratory test, the total losses of water, sodium, chloride or other elements sustained by any individual during the development of the ketonemic

acidosis. The distortions in intracellular and extracellular composition of carbohydrate, electrolyte, and water are complex and theoretic objections can be raised against almost any scheme of therapy now available because the solutions used in therapy cannot be made to be entirely physiologic to meet all needs and because the distortions in composition of the body fluids, though generally similar, are not identical in different patients.

For example, the use of hypotonic solutions of saline, rather than 0.9 per cent sodium chloride, can be advocated to accelerate cellular accumulations of water.[1] On the other hand, the value of hypotonic solutions has yet to be proved and their use may be harmful when given to patients whose initial concentration of sodium and chloride are low and/or who are in incipient or frank peripheral vascular collapse. Too rapid infusion can lead to hemolysis of red cells. Also, while the early use of glucose in diabetic coma will undoubtedly accelerate carbohydrate utilization and diminish ketosis,[1,2] its use will exaggerate renal losses of water and salt and will increase cellular dehydration. "Physiologic" saline (155 mEq./L. of Cl) can be objected to on the grounds that it contains an excess of chloride (normal chloride of extracellular fluid: 103 mEq./L.) and its use will almost invariably lead to some degree of "chloride acidosis." The early use of alkaline solutions may be advocated to promptly correct the pH of the body fluids, to increase the effectiveness of insulin, to improve cerebral utilization of oxygen and to diminish the catabolism of tissue induced by the acidosis. Yet, used injudiciously, alkalis may lead to alkalosis later in therapy or cause sodium to enter cells already depleted in potassium. Furthermore, while potassium and phosphate depletion invariably occurs during treatment, their use in therapy may be dangerous if renal function is impaired. This is such an unhappy state of affairs that the physician, especially if an expert, might lack courage even to treat a patient in diabetic coma.

On the other hand, in spite of the complexities of the problem, almost all patients in diabetic coma can be saved in spite of the occurrence of temporary, unphysiologic complications which may be induced during treatment, provided these complications are not allowed to become exaggerated. This can be accomplished by careful clinical and chemical observation of the patient during the course of therapy and by the avoidance of gross misuse of those agents used in treatment. Further, since all final adjustments in electrolyte and water composition of the body fluids are accomplished by the kidney it is of great importance to restore or maintain normal renal function. Thus, circulatory failure must be promptly treated with colloid and saline solutions, enough water must be supplied to the kidneys to maintain a good flow of urine and the concentrations of electrolytes brought at least toward the normal range. If renal function is maintained, mild or moderate temporary distortions in the composition of the body fluids will be automatically corrected.

1. *Physiologic Saline Solutions and Glucose.*— Prompt repletion with saline, of the large total losses of water, sodium and chloride, which have been sustained during the development of the acidotic state, is a part of every scheme of therapy. The losses of water and sodium chloride are not always proportionate in different individuals. All suffer from a total deficiency of salt and water, yet the concentrations of sodium and chloride in the extracellular water and blood may be low, or normal, or even somewhat elevated at the time of admission. In those patients in whom the acidosis develops gradually, the associated polydipsia may prevent severe primary deficits of water while renal losses of sodium chloride continue. In these the initial concentrations of sodium chloride will be depressed and the extracellular fluids are thus hypotonic. Should vomiting then result the salt depletion is aggravated. With salt depletion increasingly large, renal losses of water occur in an effort to maintain tonicity of the body fluids. The volumes of the blood and extracellular fluids become contracted and peripheral vascular failure ensues. Thus, those individuals who have been ill longest, before admission to the hospital, almost invariably have sustained the greatest total losses of water and electrolyte and have the poorest prognosis.

When the development of coma is rapid, water deficits may be proportionately greater than the deficits of sodium chloride. While the patient ingests no fluids, large amounts of water will be lost through the lungs with hyperventilation and through the skin. In these the concentrations of sodium and chloride may be somewhat elevated on admission. Thus the total needs of water, sodium and chloride in the individual patient

cannot be estimated by available laboratory techniques.

On the other hand balance studies have indicated that deficits as great as 35 to 40 grams of sodium chloride[3] may occur in severe ketosis. In order to cover maximum deficits, this amount (equivalent to that contained in about four liters of physiologic saline) should be given intravenously to all adult patients during the first day of therapy. Surely no more than five liters of saline are ever indicated during this interval.

The first liter of physiologic saline should be given rather rapidly, e.g., during the first one to two hours after admission; the remainder of the sodium chloride is given more slowly. Under certain circumstances alkaline solutions (e.g., 1/6 molar sodium lactate or 3 per cent sodium bicarbonate) may be definitely indicated early in treatment (see below) and can be temporarily given in place of the saline.

Also, in addition to (not in place of) the saline, the early administration of intravenous solutions of fructose may prove helpful in accelerating utilization of carbohydrate.[11] This is likely because unlike glucose, the utilization of fructose is normal in the diabetic with or without ketosis.

Furthermore, after treatment has progressed for four to six hours, and while saline is being administered at a slower rate, the addition of other therapeutic agents (e.g., glucose, potassium and phosphate) may be indicated (see below). The addition of glucose (5 per cent glucose in saline) is surely indicated when it is demonstrated that the blood sugar is definitely falling or glycosuria is disappearing (see section on use of insulin during this interval). Little objection can be raised against the use of glucose at this later time. The use of glucose *early* in treatment and in rather large amounts is another matter. This problem has provoked much debate, especially because there can be little doubt that the administration of glucose will accelerate its peripheral utilization, diminish ketosis, increase hepatic glycogenesis and prevent carbohydrate starvation. However, the treatment of diabetic coma does not involve only those measures which are useful in diminishing ketosis and accelerating carbohydrate utilization. The secondary derangement (e.g., water and salt depletion and cellular dehydration) are equally, if not more, important, in the immediate management of this medical emergency. Therefore, the most valid arguments against the early use of generous amounts of glucose are that, at this critical period, exaggerated hyperglycemia and excessive diuresis of water and electrolytes are induced. At this time the rate of glucose utilization is slow; further elevation of the blood sugar only can lead to further passage of water from already dehydrated cells. The induced, excessive diuresis will delay repletion with water and electrolytes. These arguments against the use of glucose apply only during the early hours of therapy; the advantages of the later judicious use of glucose are recognized.

Alkaline Solutions.—Since some reputable centers rather routinely employ alkaline solutions early in acidosis and others do not, it is likely that the use or omission of alkali is not crucial in the treatment of most, but not necessarily all, cases of diabetic acidosis. However, the reasons for its judicious use seem to the author to outweigh the theoretic objections which may be offered in opposition. It is true that in diabetic ketosis the sodium of the plasma is merely temporarily combined with the ketone-acids (hence, a decrease in base available to form bicarbonate) and, during treatment with insulin, a diminution of ketosis results in release of the sodium to form bicarbonate. The use of alkalis would thus seem, at most, unnecessary. In many instances this situation is undoubtedly the case. On the other hand, there is considerable evidence that the acidosis *per se* will lead to impaired action of insulin,[10] decreased cerebral utilization of oxygen[9] and accelerate catabolism of tissue.[7] Thus, the prompt, rather than gradual, alleviation of the acidosis would seem indicated in most cases. In fact, it is possible that in some instances its prompt alleviation might be crucial. Guest[7] has summarized some of the arguments in favor of the use of alkalis.

In the author's experience there are certain circumstances wherein the use of alkaline solutions are particularly indicated. These are, (1) when the hyperpnea is severe and exhausting, (2) when the coma is profound, (3) when, with therapy, the insulin needs seem unusually high, and (4) when the initial serum sodium concentration is found to be low. Only alkalis will stop severe hyperpnea, and the depth of coma, as indicated by the rate of cerebral oxygen utilization, is directly related to the degree of acidosis (pH).

But, when alkaline solutions are used, they must be used with intelligence. The early administration of an excess of alkali will later lead to alkalosis

when the ketone bodies release the sodium. Since the acidosis is already partially compensated, it is obvious that it is *not* necessary to raise the serum bicarbonate to normal levels to effect a normal pH. Also, the degree of compensation cannot be known in any case unless a pH is obtained, and this determination is not usually available. In adults, even in severe coma, 500 ml. of 3 per cent sodium bicarbonate or 1000 ml. of M/6 sodium lactate usually is sufficient to obtain the desired correction of the pH. Under no circumstance should more than 800 ml. of the bicarbonate solution or 2000 ml. of the M/6 sodium lactate be used. The desired result is usually attained by merely raising the bicarbonate 5-10 mEq. (10 to 20 volumes per cent); *not* by raising it to normal.

Since cellular and extracellular potassium depletion, in varying degrees, occurs in all patients with diabetic coma and since an excess of sodium appears to aggravate depletion in potassium, it is particularly advisable to administer potassium as soon as possible (not before four hours of treatment however) to all patients given alkaline solutions.

Potassium and Phosphate Therapy

At the time of admission, when the dehydration is severe, the concentrations of potassium and phosphate in plasma are either normal or elevated.[13] After four hours of treatment the concentrations of both are appreciably decreased, and usually by eight hours their concentrations are well below normal, unless renal function is impaired. Their concentrations fall because of the effects of dilution, because of continued excretion into the urine, and because of their movement into depleted cells. While the deleterious effects of phosphorus depletion have not been clearly defined, the evil consequences of potassium deficiency are well recognized (decreased neuromuscular function, cardiac insufficiency et cetera).

Early repletion of both elements, but especially of potassium, appears to be indicated in all but the milder cases of diabetic acidosis. Aqueous solutions containing both of these electrolytes are available.* Potassium, without phosphate, can be supplied as potassium chloride. Three precautions always *must* be observed when potassium is administered to patients in diabetic coma. First, potassium should not be given until treatment has been in progress for at least four to six hours. Second, an adequate flow of urine should be present when treatment is begun. Third, it should not be administered at a rate greater than 20 mEq. per hour (for example no more than 1.5 gm. of KCl per hour). These precautions are necessary because the concentrations of potassium tend to be high at the beginning of treatment and because toxic concentrations of potassium may result if its administration is too rapid or if renal function is impaired. These electrolytes are added to the solutions already being administered, e.g., to the physiologic saline solutions or to the glucose-in-saline or water solutions. When the patient is able to eat, this type of supplemental therapy is usually no longer necessary. Most patients are able to eat by the time they have received 75 to 100 mEq. of potassium parenterally.

Plasma or Whole Blood.—While it is apparent that the peripheral vascular failure in diabetic acidosis is mainly a consequence of salt depletion, it is equally apparent that in some cases salt replacement alone is not adequate therapy. It is known that the shock of salt depletion is more adequately treated with colloid solutions and saline than with saline alone.[15] Plasma or blood should be immediately administered to any patient whose blood pressure does not promptly respond to administered saline, or to any patient whose blood pressure falls toward critical levels during treatment. This procedure can be life-saving.

*Ampuls containing 25.8 mEq. of potassium as dibasic and monobasic potassium phosphate are available from the Eli Lilly & Company, Indianapolis.

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The Problem of Diabetic Retinopathy

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A REVIEW of the historical aspects of diabetic retinopathy uncovers some interesting facts. Jaeger[21] in 1856 first described the specific ophthalmoscopic changes in diabetic patients but it was thirty-four years later that Hirschberg[17] published his paper dividing the retinal changes into three groups.

1. Central punctate retinitis—an "inflammation" of the retina.
2. Retinal hemorrhages.
3. Pigmentary degeneration.

From 1899 until the introduction of insulin in 1921, and the subsequent investigations of the "post-insulin" era, the controversial point was whether the ophthalmoscopic changes present in diabetic patients were "specific" to the diabetes or "non-specific," related to arteriosclerosis.

The inability to solve the problem at that time seems to have been based on two facts. First, there was a relatively small group of patients on whom observations could be made in this "pre-insulin" period. They were the older individuals who developed mild diabetes later in life and who could be controlled by diet only and in whom arteriosclerosis was present prior to the development of the diabetes. Second, as Friedenwald[14] has pointed out in this period very few eyes were examined and in these little attention was paid to the vascular picture. This seems remarkable in view of the fact that as early as 1876 MacKenzie[26] first described the microaneurysms which have played so important a part in our present knowledge of the pathogenesis of diabetic retinopathy, as we shall see later. Today it is hard to account for the long period of time that elapsed from its first description in 1876 until the 1940's when the intensive investigation was begun by Ballantyne and Lowenstein,[3,4] Friedenwald[14] and Ashton.[2]

With the discovery of insulin there was a marked change in the outlook for the diabetic patient, particularly from the standpoint of life expectancy. The introduction of antibiotics markedly reduced the mortality from infections and further increased the life expectancy. But with the boon of insulin and antibiotics the bane of vascular complications increased with the increase in the life span of the diabetic. This is demonstrated in two series of cases of Joslin and Wilson.[20] The causes of death given for 157 children who died between 1908 and 1922 were 86 per cent died of diabetic coma and 6.4 per cent of infections, whereas in 135 children who died between 1944 and 1949, 9.6 per cent died of coma, 7.4 per cent of infections, 11.9 per cent of tuberculosis, while 59.3 per cent died of cardiorenal vascular disease. In this latter series 60 per cent of these children had retinopathy and 4 per cent retinitis proliferans. This is in striking contrast to Duke-Elder's statement[13] in 1940 that diabetic retinopathy prior to the age of forty is rare.

Thus as the patients lived longer due to the introduction of insulin and as the mortality from infection was decreased by the antibiotics, the incidence of vascular complications rapidly increased. With the increase in vascular complications there was an increase in the incidence of visible ophthalmoscopic changes, in fact, in all of the ophthalmologic complications. Wagener[35] found in 1921 only 8.3 per cent with retinopathy; in 1934, 17.7 per cent; and in 1945, 30 per cent. The latter figure approximates the 31.7 per cent of 561 patients of all age groups in 1946 reported by Ballantyne.[5] Friedenwald found diabetic retinopathy three times as frequent in the postinsulin period as in the early insulin period.[14]

Analogous to Joslin and Wilson's mortality studies[20] are the findings of Wagener[35] in 1921, none of the patients with retinopathy was under the age of forty (see also Duke-Elder above), in 1934, 4.3 per cent were below the age of forty and this figure was tripled to 12.9 per cent (or 8.3 per cent of the total) in 1945. In 1952 the present authors[34] in a series of thirty-four patients with advanced diabetic retinopathy showing proliferating retinopathy and neovascularization, 26 per cent of the patients were below the age of forty. While admittedly this series is small it nevertheless shows that the juvenile diabetics are living long enough to develop advanced diabetic retinopathy.

Recently two problems have been of great importance from a diabeto-ophthalmologic standpoint. They are:

1. The influence of control of diabetes on the development of vascular lesions.
2. The pathogenesis of diabetic retinopathy.

Influence of Control of Diabetes on Development of Vascular Lesions

A. *Free or Normal Diet School.*

This school, championed by Dolger[11] and Tolstoi[33] feels that vascular lesions are a part of the diabetic process and not influenced by the control of the blood sugar. In a series of 200 patients with the duration of diabetes up to twenty-five years, Dolger reported that all showed retinal hemorrhages regardless of duration, degree or type of treatment.

The criterion of treatment consists of a maintenance of the weight level at all times, the freedom from symptoms and ketosis and the use of insulin for hyperglycemia particularly for the prevention of excessively high blood sugar.

Friedenwald[14] and Ashton[1] have noted that the development of retinal hemorrhages is not closely related to the degree of control of the diabetes.

Some evidence to support this theory is reported by Bell[10] who studied the vascular lesions in 1,559 autopsies on diabetic patients. In this study 5 per cent developed diabetes before the age of twenty in which no deaths were found due to vascular disease; 16 per cent developed diabetes before the age of forty of which 23 per cent died from vascular disease; and 70 per cent developed diabetes after the age of fifty in which 54 per cent died from vascular disease. In a control group of nondiabetics 30 per cent over fifty died from some form of vascular disease. From this it was postulated that only 24 per cent rather than 54 per cent died from vascular disease due to the diabetes. With the onset of the diabetes before forty, there was a striking influence of the duration of the diabetes on the development of vascular disease. In the first ten years of the disease, few patients presented evidence of vascular disease but after twenty years few patients were free of vascular disease. Of ninety-three patients who had the disease more than twenty years, twenty-eight revealed no serious vascular disease at autopsy. The authors felt that the presence or absence of vascular disease could not be related to better control.

B. *Rigid Control School.*

The outstanding exponents of this theory (Joslin, Root, Wilson, Marble, White, et cetera) feel that the vascular changes are directly attributable to uncontrolled diabetes and can be prevented to a great extent by rigid dietary restriction and control of blood sugar at all times.

Joslin[19] reported that twenty-three patients had received the Victory Medal. The age of onset ranged from fourteen and a half to thirty-two years, but only one patient was over twenty-three years of age. The longest duration was thirty-four years. The youngest was twenty-seven and the oldest sixty-one.

In this same paper Joslin reported that forty patients under his care had had diabetes from thirty to thirty-five years with its onset in childhood. Thirty-three of the forty were working steadily and 82 per cent had ocular involvement, but only five had proliferating retinopathy. None of the forty were blind. Of 181 patients who had had diabetes twenty to thirty years 114 were checked by ophthalmologists and 56 (49 per cent) showed retinal arteriosclerosis; 5 per cent had retinal hemorrhages, and twenty-three had exudates. Seventeen had proliferating retinopathy and six patients had cataracts. Four were almost or completely blind and three were blind in one eye.

Spoont et al[32] studied a series of fifty patients, all of whom had had diabetes at least ten years, seven of whom the onset had been before the age of twenty. Twenty-five were considered well controlled and twenty-five considered poorly controlled. In the well controlled group four (16 per cent) had retinal lesions while in the poorly controlled group seventeen (68 per cent) had retinopathy.

Walker,[36] reporting on seventy-five juvenile diabetics, shows a correlation not only in the duration of the diabetes on the development of retinopathy but on the degree of control as well.

Sherrill[31] reported on twenty-six diabetics of twenty to thirty-eight years duration with the onset of diabetes after eighteen years of age and fourteen patients with a twenty to thirty year duration with onset before seventeen years of age. All of these cases were well controlled. In the entire group only eight showed grade II diabetic retinopathy (Boston group class). The rest showed only grade I or less.

Grayzel and Warshall[16] reported on twenty-five patients with juvenile diabetes, the range from eleven to twenty-eight years and the age of onset at twenty-seven years or younger. All seven patients with good control showed an absence of retinopathy while seven classified as poorly controlled

TABLE I.

Duration	Controlled	Free Diet	Coma
10-15 yrs.	18%	19	58
15-20 yrs.	40%	52	62
20-34 yrs.	36%	68	70

showed retinal involvement and two showed renal involvement.

Post and Stickle[28] concluded in their study of juvenile diabetics that the control as well as the duration of the diabetes is an important factor in the development of diabetic retinopathy, renal damage, and poor physical condition.

Keiding, Root and Marble[23] in a study of 451 cases found that in diabetic patients with the duration of twenty years or more, moderate or marked retinopathy, arteriole calcification and nephropathy existed in 54 per cent of cases well controlled, 73 per cent of cases with fair control, and 92 per cent with poor control. They concluded that the vascular complications were related not only to duration but to the degree of control as well.

Wilson, Root, and Marble[38] carried out a direct comparison in 221 patients between the "ideal" control, the "free diet" group and a "coma" group, insofar as vascular complications were concerned. The "ideal control" group followed the requirements of their system of control; the "free diet" group followed the Tolstoi-Dolger régime; and the "coma" group had had diabetic coma on one or more occasions regardless of cause or previous management and with few exceptions were consistently poorly controlled. Each of the three management groups were subdivided according to the duration into a ten to fifteen-year group, a fifteen to twenty-year group, and a twenty-one to thirty-four-year group. Their findings relative to advanced lesions are shown in Table I.

Their conclusions were that the increase in frequency severity of degenerative vascular complications of diabetes was commensurate with the increases in duration of the disease. For any given duration of the disease there was a significant lower incidence of the advanced degenerative changes among those patients who had maintained better control and that for each ensuing decade of duration the effect of good control became more important. Eight per cent of those under rigid control after twenty years showed normal retinae and an absence of calcified blood vessels while none under the "free diet" management showed them. Between twenty to thirty-four years 57 per cent of the "free diet" group showed advanced degenerative changes while only 25 per cent of the well controlled group showed such lesions.

In preparation for this paper, we surveyed 385 cases seen during the past few weeks in office and clinic practice. There was no selection of these cases nor has any attempt been made to differentiate those with hypertension or increased capillary fragility as we felt that they were equally present in both series. In this group there were 277 patients whose diabetic control we deemed satisfactory, and 108 patients whose control did not fit our accepted standards during the years in which they had been under observation. It is interesting that in the majority of adequately controlled patients having had diabetes from six to over twenty years, the incidence of extensive retinitis was significantly less than in the poorly controlled group. Of the 277 patients with good control, 261 had no retinal changes or no more than two or three punctuate hemorrhages. Of the twenty-seven patients who had diabetes more than twenty years, twenty-three had only minimal changes. Of the 108 patients poorly controlled, only fifty-five had minimal changes. Nine of the twenty-year group had advanced retinitis.

Anti-Fragility Drugs

The relationship of capillary fragility and diabetic retinopathy is a controversial subject. However, we have been impressed that a large number of cases do show marked increase in their capillary fragility and this was most noticeable in the young diabetic beginning to develop the picture of diabetic nephrosis, and, indeed, it seemed to show almost a direct proportion between the degree of capillary fragility and of retinitis. It seemed logical to us that there should be an attempt to correct this abnormality. There are conflicting reports in the literature. Barnes,[6] Rodriguez and Root[30] and Levitan[24] feel the Rutin was ineffectual in the management of retinitis. Wilder,[37] Donegan and Thomas,[12] Beardwood, Roberts and Trueman[7] report some decrease in the incidence of hemorrhages in those patients with increased capillary fragility, which was correctable by the use of anti-fragility drugs. With this in mind, we are treating a series of juvenile diabetics with increased capillary fragility, but no evidence of retinitis, with Rutin in doses adequate to maintain normal capillary fragility. This study has not progressed suf-

ficiently for us to draw any conclusions nor can proper evaluation be made until at least ten years of such a program.

Urinary Infections

Chronic urinary infections in the diabetic, if uncorrected, are apt to produce over a period of years a pyelonephritis terminating in a condition which is difficult to differentiate clinically from intercapillary glomerulonephrosclerosis. Indeed, so similar is the late picture of a pyelonephritis in the diabetic that there is a tendency to group it with Kimmelstiel-Wilson's disease under the name of diabetic nephropathy. We feel it is essential to follow these cases very carefully over months and years to make sure that the urinary infection has been eradicated by the judicious use of antibiotics, remembering also that urine which contains sugar is oftentimes a good culture media for the organisms most frequently found in the urinary tract and that to eradicate many of these pyurias, the urine must be kept sugar free even if multiple doses of regular insulin are required.

Diabetic Nephrosis

Diabetic nephrosis, which by general usage includes the so-called Kimmelstiel-Wilson syndrome as well as pyelonephritis secondary to long-standing urinary infections is practically always associated with a varying degree of diabetic retinitis. Indeed, retinitis is one of the presenting symptoms of this syndrome. The etiology of the Kimmelstiel-Wilson picture is not well established. Not only do these two conditions occur together but so similar is their pathological description that the question naturally is raised as to whether or not one common etiological factor may not account for both.

While the question of the effect of control on vascular complications has not been answered as yet we feel that since the preponderance of evidence is in the favor of the "rigid control school" adherence to the régime of that school should be followed until the problem is solved completely and to everyone's satisfaction.

Pathogenesis of Diabetic Retinopathy

Within the past ten years considerable light has been thrown on the nature of the vascular degenerative changes in diabetes by ophthalmologic investigation. It has been well established that the earliest lesions in the retina in diabetic retinopathy are the capillary microaneurysms which we have seen were first described by MacKenzie in 1876. This observation has been repeatedly confirmed by the work of Ballantyne and Lowenstein,[3,4] Friedenwald[14] and Ashton.[2] Furthermore, a further link has been added by the work of Ashton who has shown a close similarity in the staining characteristics of the hyaline of retinal capillary aneurysmal dilatations and the hyaline material found in the nodules of the kidney in intercapillary glomerulosclerosis of Kimmelstiel-Wilson[2] disease.

Further observations and investigations suggested that other hormonal factors contributed to the development of the vascular degenerative changes, not inherent in the diabetic process itself. Poulsen[29] reported on the recovery from diabetic retinopathy in the case of diabetes who developed Simmond's Disease following a severe postpartum hemorrhage. In his paper he reviewed a series of eight previous cases in the literature of the Houssay phenomenon in man; none of the cases, however, had had careful ophthalmologic examination.

It is known that experimental animals made diabetic by the use of alloxan do not develop retinopathy.[18] However, Lukens and Dohan[25] have found the lesions of intercapillary glomerulosclerosis in the kidney of an animal made diabetic for five years by the use of anterior pituitary extract.

Recent work has suggested an adrenal cortex factor in the development of diabetic retinopathy. Friedenwald[15] and Becker[8] reported on observations on pregnant diabetics developing retinopathy which disappeared following the termination of the pregnancy. They felt that during pregnancy there was an increase in the production of the adrenocorticotropic hormone producing retinopathy but that after the pregnancy was ended there was a decrease in the production of this hormone and the retinopathy cleared.

The ACTH factor was further confirmed by the appearance of capillary aneurysmal lesions in the fundi of two patients receiving intravenous corticotropin for sarcoid and their disappearance when the corticotropin was stopped. Becker[8] also found capillary aneurysms in some patients with adrenal hyperplasia.

As we have seen, alloxan diabetic animals do not develop retinopathy but Becker[8] was able to produce the changes of early diabetic retinopathy by ophthalmoscopic examination and capillary

aneurysms and changes in the capillary pattern by microscopic examination in alloxan diabetic animals treated with ACTH.

Becker[8] in the study of the adrenal glands at autopsy of patients with and without intercapillary glomerulosclerosis attempted to correlate the cortisone production with the development of the renal and retinal lesions. He theorized that there is a compensatory decrease in the capacity of the adrenal cortex in certain activities in the uncomplicated diabetic, but in the diabetic with renal and retinal vascular lesions the normal or increased capacity of the adrenal cortex may be related to the causation of these lesions. This was based on the fact that the adrenal glands in the patient with Kimmelstiel-Wilson lesions weighed 24 per cent more than an almost equal number of patients without Kimmelstiel-Wilson lesion. A further finding was that in the paients with Kimmelsteil-Wilson syndrome there was a higher incidence of lipoid vacuoles in the cortex than in the uncomplicated diabetic and non-diabetic adrenal gland.

Becker[9] at the 1953 meeting of the Eastern Section of the Association for Research in Ophthalmology summarized the evidence for the role of the adrenal cortex in the pathogenesis of Kimmelstiel-Wilson-diabetic retinopathy syndrome as follows:

1. Clinical Evidence. Decreased adrenal capacity in diabetics without retinopathy and relatively increased adrenal function in diabetics with retinopathy—by oxysteroid excretion.
2. Therapeutic Evidence. Possible improvement of diabetic retinopathy by decreasing adrenal function—observation in Simmond's Disease in diabetics, observations on the use of testosterone and following adrenalectomy.
3. Hystopathologic Evidence. Relative adrenal hypotrophy, excessive lipoid vacuolization and increased incidence of adrenal cortical adenomas in the Kimmelstiel-Wilson-diabetic-retinopathy group.
4. Experimental Evidence. Production of lesions simulating diabetic retinopathy and Kimmelstiel-Wilson in alloxan diabetic rabbits by use of cortisone or ACTH.

Maumenee[27] in his splendid review of diabetic retinopathy in the year 1952, felt that this association was inconstant, quoting also Kane,[22] Wilson, Root, and Marble[38] and Keiding, Root, and Marble.[23] Our observations at the Graduate Hospital tend to confirm Maumenee's opinion.

One must concede that the weight of observations and investigations is on the side of the adrenal cortex as playing a major role in the development of diabetic retinopathy, but whether this is the answer or only an integral linking in the chain leading the "X" factor depends on further laboratory and clinical investigations. Our present methods of evaluating the function of the adrenals are far from satisfactory. Can one postulate that the diabetic with increased adrenal function is more difficult to control or more careless than the one with normal cortical excretion.

Comments

It has always been the opinion of the authors that closer co-operation between the internist, particularly those treating diabetics, and the ophthalmologist is imperative. It has been felt that the diabetic patient should have a complete ophthalmologic survey at least once a year and if practicable twice a year. It is felt that the internist should himself check the patient's eye grounds periodically. Certainly it is not expected that the internist be an expert in the ophthalmologic field but he should be able to use an ophthalmoscope well enough to recognize the ophthalmoscopic changes seen in diabetic retinopathy. At the Graduate School of Medicine of the University of Pennsylvania the Ophthalmology Department faculty lecturing the internal medicine group attempts to reacquaint the students with the use of the ophthalmoscope and demonstrate the ophthalmoscopic changes found in general medical conditions. In general, the recognition of the normal ophthalmoscopic appearance of the ocular fundus is the basis upon which pathologic changes are recognized.

The presence or suspicion of pathology indicates the necessity for an ophthalmologist's examination and opinion. It has been repeatedly reported and the observation of most ophthalmologists that only after development of visual complaints is an ocular examination requested. Most ophthalmologists have encountered occasionally diabetic retinopathy in some degree during the process of an ophthalmologic examination in a patient in whom the disease was undiagnosed or even unsuspected. Certainly in the cases of hospitalized diabetic patients an ophthalmologic consultation is an integral part of the studies.

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Functional Rehabilitation in Diabetes

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The Proposition

SUBSTITUTIONAL therapy with insulin has by and large crowded out the much more physiological principle of functional rehabilitation of the patient's own insulin-producing mechanism.[4,5] It has been amply demonstrated in the endocrinopathies and in physiology in general that vicarious substitution from without for a lame hormonal function further depresses and may even suppress the intrinsic productive source of that hormone.[9,11,15,19,23,24] It is well recognized that the normal stimulus to an intact insulin-producing mechanism is ingested carbohydrate.[6] Homeostatic influences which level off the short, transient and normal postprandial rises in blood glucose are actually called into play by the very fact that there is present this effective stimulus to initiate their activity (Fig. 1). The uncontrolled diabetic patient has long since become unresponsive to such delicate glucose stimulation; his insulin-producing mechanism has become refractory to a heightened blood glucose, which in the normal would constitute a real and tremendous stimulus (much as the frog-muscle preparation becomes refractory to long-continued and unremitting galvanic stimulation). As in normals, responsiveness on the part of the organism to such glucose stimulation is, moreover, measurable in diabetics by means of the insulin-sensitivity test or the glucose-insulin tolerance test in one of its several forms.[12,13,14,18,21] A large majority of obese adult diabetics (and accordingly, therefore, most diabetics in general) are not only unresponsive to blood glucose but are also sluggish and relatively unresponsive to insulin administered by vein.[14] As a result of adequate treatment, these diabetics can usually by re-converted to partial and, for practical purposes, almost to normal responsiveness to insulin and, by the same token, responsiveness to ingested glucose.[4,5] Such renewed reactivity to glucose is in direct linear proportion to the organism's measurable improved sensitivity to insulin from without.[14] Whereas well-timed and cautious administration of carbohydrate will usually stimulate the obese adult type of diabetic after "the decks" have once been cleared of unrelenting hyperglycemia, the excessive administration of extrinsic insulin can in these same patients have the opposite effect of further depressing or even suppressing the native insulin-producing mechanism. Evans and Haist[10] have demonstrated this suppressive phenomenon on the islet tissue of growing rats as have McJunkin and Roberts.[20] In 1942 Mirsky [21] and his associates called attention to the same principle clinically. It has, moreover, been observed by all practitioners, even if the significance has not always been fully appreciated, that progressively increasing needs for extrinsic insulin occur in individuals who are carelessly treated from a dietetic standpoint or who are lavishly and vicariously exposed to excessive insulin from without. These patients had been primarily suffering only from a *relative* insufficiency of insulin which could usually have been corrected by reducing the excessive insulin demands by proper dietary and weight control (with or without insulin). By dietary inebriety with its attendant excesses of extrinsic insulin, these patients are gradually and insidiously converted by attrition or by suppression or both into cases of absolute insulin-insufficiency (Fig. 2), with function irretrievable to the exact extent that the *absolute* defect has replaced the *relative*. In the juvenile type of diabetes which is, accordingly, essentially a different disorder from typical adult diabetes, the state of absolute insufficiency rapidly supervenes. In these patients, the extent of the absolute defect is indirectly measurable by the same glucose-insulin tolerance test, but in this case, in contrast with the obese adult with a predominatingly relative insufficiency, the juvenile type of patient instead of decreased responsiveness shows as in other hormonal absolute insufficiency [15,16] excessive responsiveness or sensitivity to insulin. Bornstein[7] has correlated low insulin content (unopposed glucose lowering factors) in the blood with the juvenile type of case at any age, as opposed to the obese adult diabetic who presumably carries a much larger effective blood insulin content and is, accordingly, deficient only in a *relative* sense. Lawrence[8,17] of London has sensed the same difference clinically. Of practical

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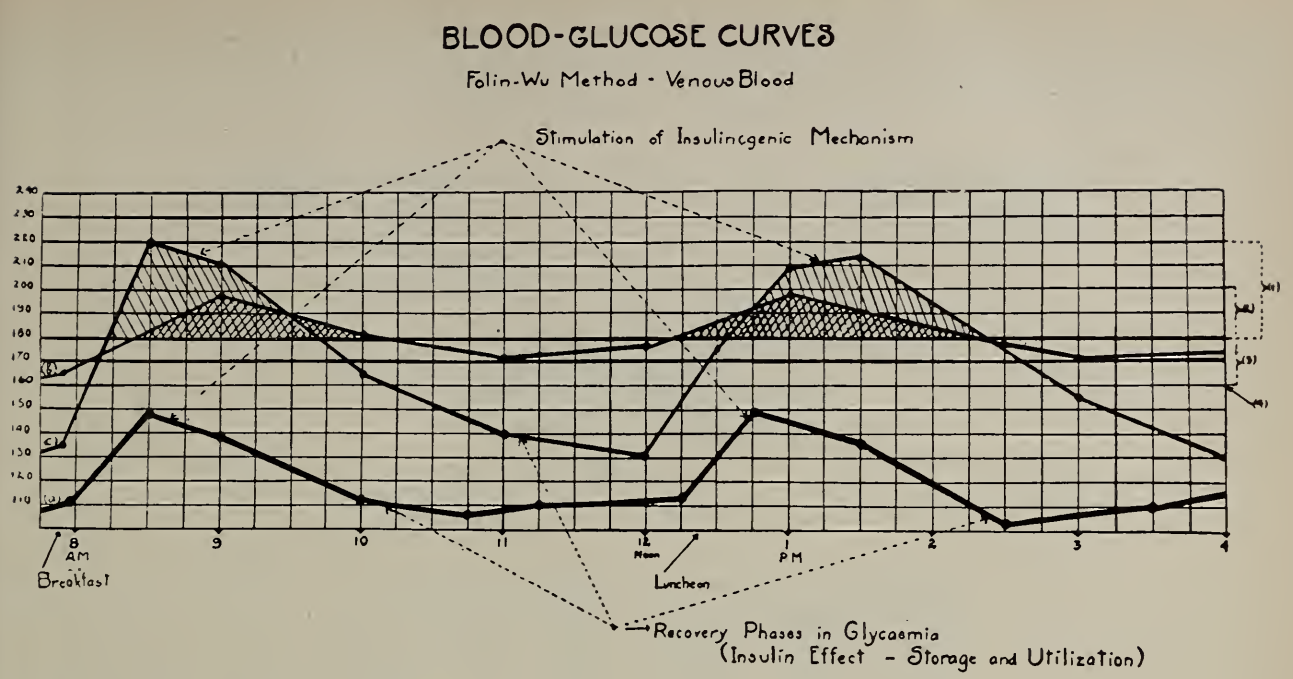


Fig. 1. (From the Brooklyn Hospital Journal)

(a) Normal sugar curves.

(b) So-called "mild" diabetic (10 gm. glucose in urine in 24 hours) (No recovery from hyperglycemia); *Really severe diabetes* because of chronically fatigued mechanism—no stimulation by carbohydrate or blood sugar.

(c) Diabetic (same) under reasonably good sugar control (despite increase to 25 gm. glucose in urine in 24 hours). Patient on stimulating type of diet—ante-cibal and postabsorptive recovery periods each day. Note that curves are parallel with those of normals, but at a higher level.

(1) 25 gm. glucose in urine in 24 hours.

(2) 10 gm.

(3) Higher thresholds for glucose in diabetes.

(4) Normal threshold limit.

clinical importance, however, is the fact that as the relative insufficiency is superseded by an absolute deficiency, the patient becomes more and more sensitive[4,5,14] in his response to extrinsic insulin, until finally he becomes extremely unstable and unpredictable in all of his responses to insulin, a condition labelled by Woodyatt as the "brittle state." In the absence of demonstrable liver pathology or of clinically apparent hypophysial or adreno-cortical insufficiency, the clinical development of the "brittle state" in a diabetic can safely be interpreted as heralding in the existence of a marked *absolute* insulin insufficiency in that patient. The essayist has observed a number of such individuals[27] in whom, on extensive postmortem tissue section, no islet tissue at all could be found. Whereas the diabetic patient with a *relative* intrinsic insulin deficiency can usually be rehabilitated by measured dietary stimulation after having reduced the load-demand for insulin, the patient who has developed a predominant *absolute* insufficiency has already become a lost cause so far as possible intrinsic rehabilitation is concerned. It would seem obvious that further stimulation by glucose of an already

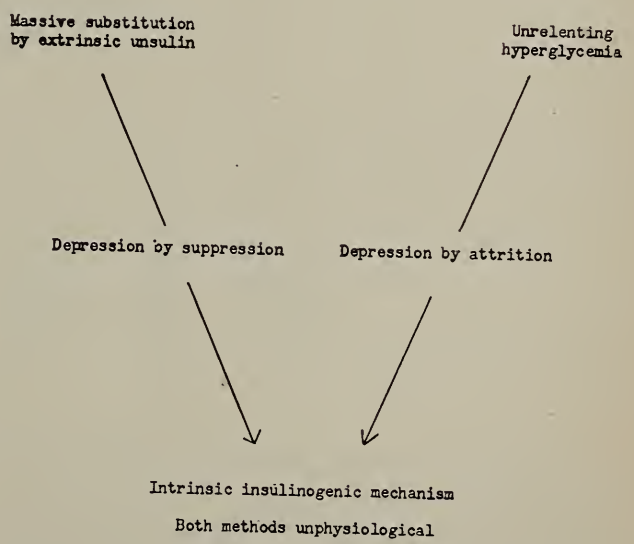


Fig. 2. (From the Brooklyn Hospital Journal).

oversensitive intrinsic* mechanism would in these patients constitute a therapeutic contraindication. They must of necessity be surrendered to total insulin substitutional therapy from without. Their need is for stabilization (Fig. 3) rather than for stimulation. Stabilization of sensitivity can readily be accomplished by moderate dietary restriction of carbohydrate together with liberalization in protein and fat. Fortunately, this category of patients represents only about 15 per cent of all diabetics—for the most part the juvenile type or the long neglected overinsulinized adult type who has progressed to the state of extensive absolute insulin insufficiency.

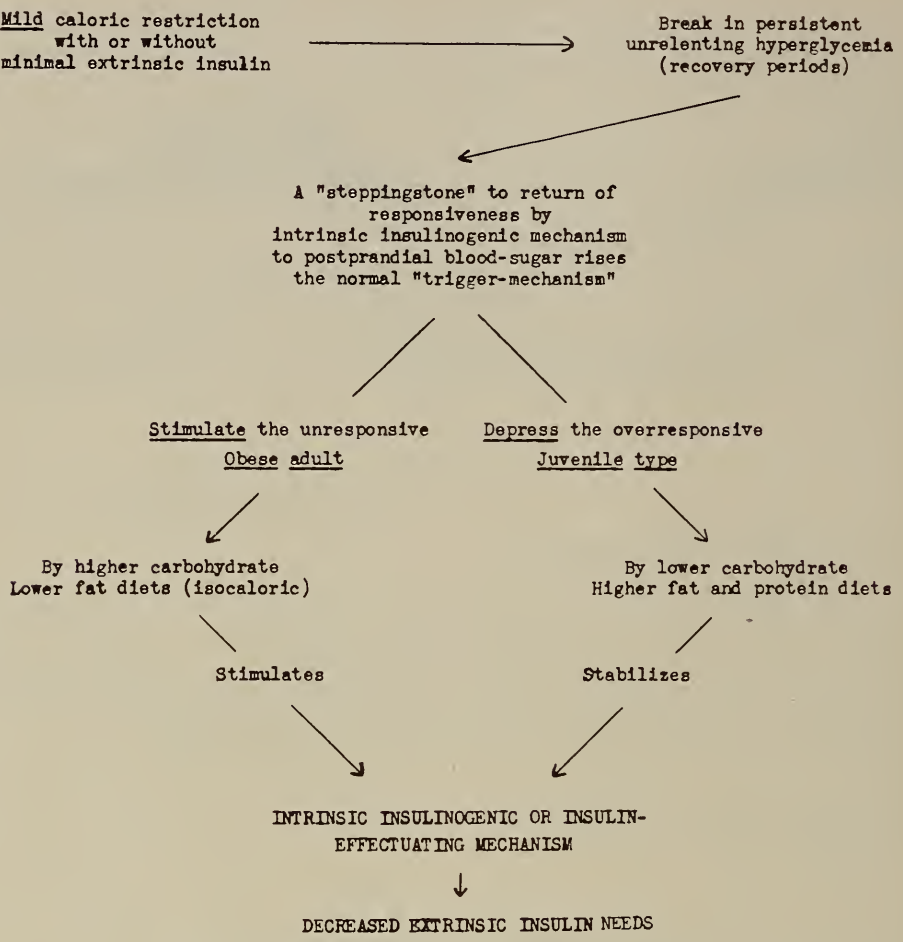


Fig. 3. (From the Brooklyn Hospital Journal).

*The essayist has advisedly referred to "stimulation" or "depression" of the insulinogenic mechanism rather than of the beta cells themselves, since it has not been unequivocally proven which of the component factors of the mechanism are the direct targets of such stimulation or restraint. The phenomenon of stimulation is well recognized, however, and has been well established by the author and his associates in observations on over five hundred diabetic patients. This fact transcends in practical importance the academic considerations of the pathways, which must await future exploration. The *fait accompli* itself must stand unchallenged in view of the consistency of favorable results obtained.

Rehabilitation

Having fixed these premises in mind, the physician has open to him a wide field for constructive rehabilitation in accordance with a sound engineering technique rather than with a pointless "hit and miss" approach to treatment limited ideologically to correcting only a sign of the basic disorder, the persistent hyperglycemia. Functional rehabilitation attacks not merely the sign but the basic disorder which has created the sign. The medical attendant, accordingly, must heroically break up the unrelenting hyperglycemia only as a means, however, to the ultimate end of intrinsic rehabilitation. He achieves this correction of hyperglycemia by carefully mapping out a diet, the most important fact of which is the prescription of a caloric allowance which initially is critically balanced precisely at the individual's

basal fuel needs. If the patient is overweight, his caloric intake is, accordingly, calculated to have him lose weight slowly but steadily; if the body-weight is normal or within 15 per cent below normal, the diet prescription should permit of no further gain in weight whatsoever. Unless the patient is painfully undernourished, initial dietary treatment should permit of no weight gain. Usually twenty-five calories per kilogram at the individual's normal nude actuarial weight will meet this end. On this regimen, the possible additional burden imposed on the intrinsic insulin-producing mechanism of having to polymerize into depot fat[26] the small carbon fragments of any excessive fuel intake is foregone. At the same time, the carbohydrate moiety of the diet is initially kept below an effectively stimulating dose, namely 150 gm. or less daily. The ineffective stimulus, that of unrelenting hyperglycemia, must be broken at any cost. If in spite of the above dietary measures, gluconeogenesis persists (as is suggested by the presence of unrelenting hyper-

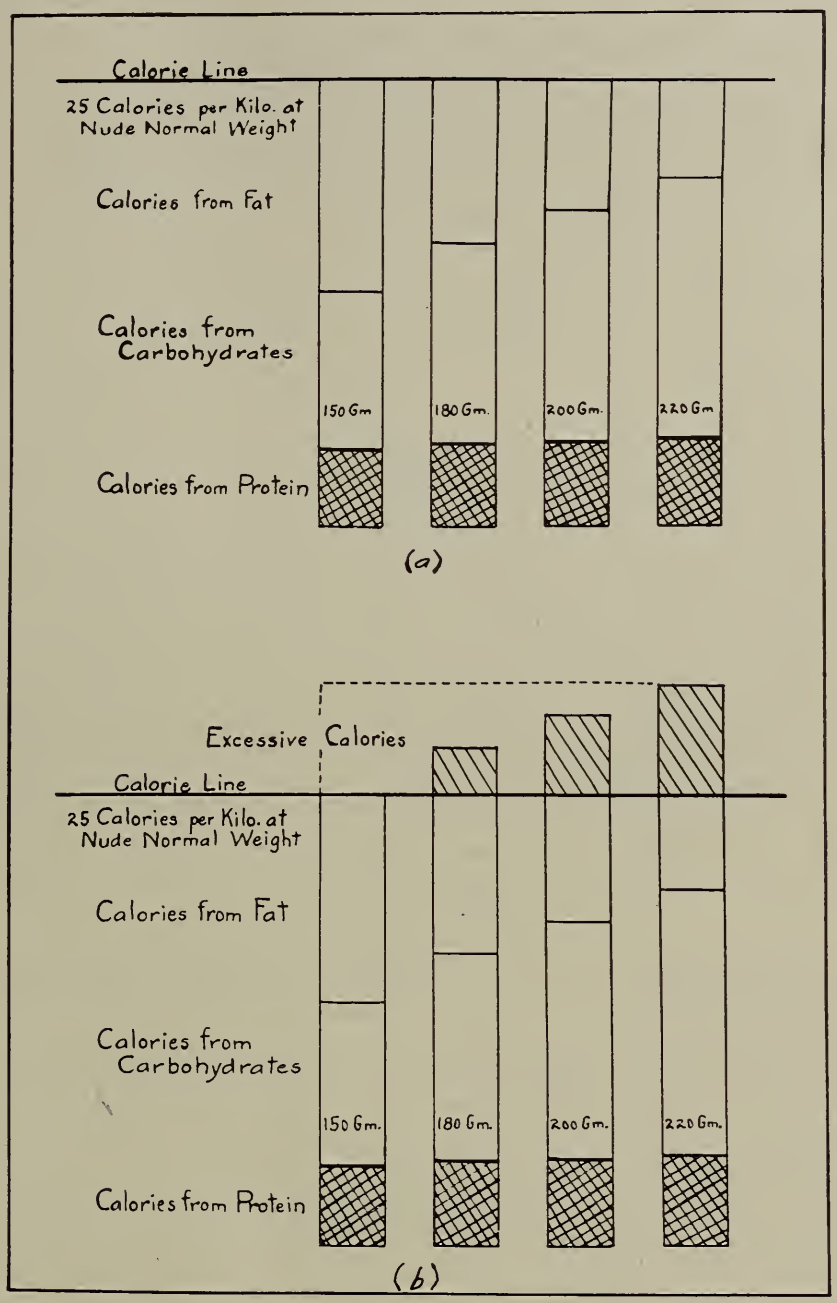


Fig. 4. (From the Brooklyn Hospital Journal).

glycemia and glycosuria in spite of weight loss and dietary restriction), extrinsic insulin must be used in carefully meted out step-ladder amounts, the while at the expense of progressively reducing its content of fat. As the carbohydrate is thus increased, unless there is some complicating factor

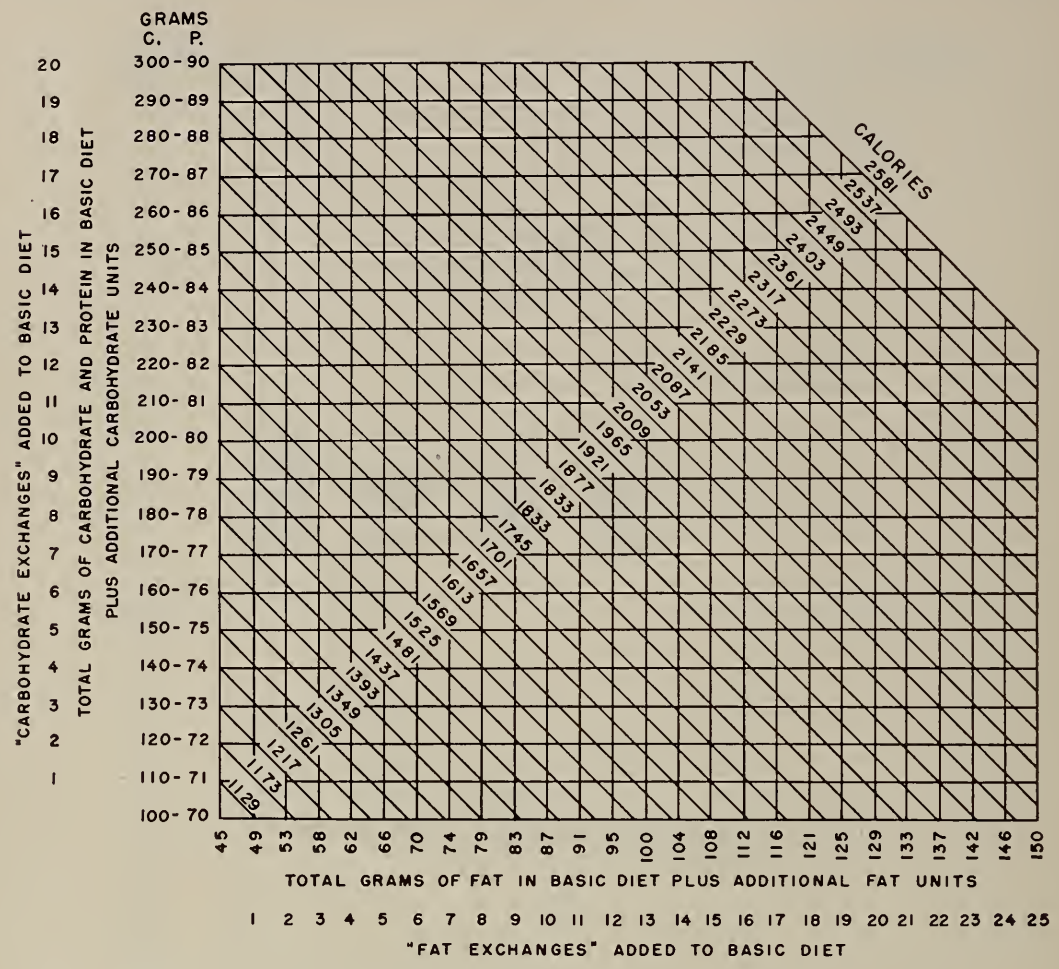


Fig. 5. (Endocrine Treatment in General Practice. New York: Springer Publishing Co., ? ?
The diet prescription graph is built on a "basic diet" of 1,085 calories, which is represented by the bottom left-hand corner of the graph:—carbohydrate, 100 gm.; protein, 70 gm., and fat 45 gm.

The horizontal lines from the bottom up represent "carbohydrate exchanges" (each equaling carbohydrate, 10 gm.; protein, 1 gm., and 44 calories) to be added to the basic diet.

The vertical lines from left to right represent "fat exchanges" (each equaling fat, 4.2 gm., 37.8 calories) to be added to the basic diet.

The diagonal lines represent the total caloric values of the basic diet, plus such carbohydrate and fat exchanges as may be added to the "basic diet."

The point on a diagonal line at which the horizontal and vertical lines meet on or next to that diagonal line indicates (on that diagonal line) the total caloric value of the diet represented by that particular combination of carbohydrate (including protein) and fat exchanges which has been added to the basic diet.

but always only in such limited dosage as may be absolutely necessary to "clear the decks" of the ineffective and fatiguing stimulus, persistent hyperglycemia. Having once established a consistent break in the unrelenting hyperglycemia, it is now usually possible again to stimulate as in normals the intrinsic insulin mechanism by increasing carbohydrate ingestion in step-ladder manner to 180, 200, 220 or more grams daily, however, keeping the diet religiously isocaloric all such as hypermetabolism incidental to infection, hyperthyroidism, neoplasm, lymphoma, or temperature, extrinsic insulin needs will progressively decrease. If, on the other hand, before functional recovery has occurred, carbohydrate is stepped up by straight caloric addition of this carbohydrate to the original diet, when the total increase in calories approximates 20 per cent or more over the original allowance, persistent hyperglycemia and glycosuria will usually reappear (Fig. 4). The

control of these resumed and undesirable signs will usually require heroic increases in extrinsic insulin, a backward step, for functional recovery will then have given way to progressively increasing insulin requirements. The "isocaloric diet" must, accordingly, necessarily be retained during this period of rehabilitation or until such time as the insulin dosage has been reduced and stabilized at the patient's absolute minimal needs for insulin. Thereupon, a slow buildup of dietary fat to meet optimal balanced caloric needs for that patient will usually be tolerated and usually without additional insulin, provided, however, weight gain is not countenanced or, at least, kept very slow.

For the juvenile type of diabetic, the individual who is already unduly sensitive to insulin, whether in a child or an adult, the same initial technique is employed. Protein intake is, however, liberalized to 1.5 or 2 gm. per kilo. When "the decks" have been cleared of unrelenting hyperglycemia (i.e., recovery periods in blood sugar before meals have been achieved) stimulation by abundant carbohydrate is carefully avoided, its being preferable to keep the carbohydrate dosage within the neutral zone of about 150 gm. or at most 180 gm. (only a mildly stimulating dose).

Stimulation by Carbohydrate

What constitutes a "stimulating" intake of carbohydrate? Response by the adult type of diabetic to the stimulus, ingested carbohydrate, even with functional improvement, is, of course, usually less delicate than it is in the normal nondiabetic individual. Whereas the normal individual retains his normal insulin sensitivity on an intake of 100 gm. daily, in the adult type of diabetic 150 gm. is usually insufficient to act as an effective stimulus (or in other words, is near to the neutral point). It has repeatedly been demonstrated in the Teaching Clinic of the Brooklyn Hospital[3] that above this level stimulation does occur as this can be measured by the insulin sensitivity test, but always provided the total caloric intake is kept carefully adjusted at the basal requirements of the patient. When stimulation is desired, carbohydrate is gradually stepped up to from 200 to 250 gm. daily, always at the expense of the fat moiety of the diet. The success of the Rabinowitch[22] dietary regime in all probability hinges largely on its restricted fat and, accordingly, caloric content.

As F. M. Allen's[2] original fundamental work has so well indicated, insulin needs in an individual are more a function of the total caloric ingestion than of the absolute carbohydrate value of the therapeutic diet. If heed is not given to the total caloric value of the diet, the above phenomenon of stimulation and/or rehabilitation of the intrinsic insulin-producing mechanism is completely vitiated. Neglect on the part of the clinician to appreciate that added carbohydrate may not be given as added calories has been largely responsible for failure to achieve adequate stimulation and rejuvenation of the patient's own intrinsic insulin-producing mechanism.

Addendum

From a practical standpoint, the above principles can be put into effect by creating a "basic diet" of carbohydrates, 100 gm.; protein, 70 gm., and fat, 45 gm., to which may be added in accordance with the "Diet Prescription Graph" (Fig. 5) "Carbohydrate Exchanges," each of 10 gm. value, or "Fat Exchanges" each of 5 gm. value, or both. It is obvious that if the diet is to be kept "isocaloric" with reciprocal readjustments of carbohydrate and fat, the clinician should for his convenience have some sort of flexible diet-prescription method. To this end, the Metabolism Group at The Brooklyn Hospital has produced the graph presented in Figure 5 as well as a small "Diet Prescription Booklet" which is presented by the physician to the patient.**

Conclusion

Diabetes is a group of syndromes with a common sign, sustained hyperglycemia. All of these syndromes are associated with insulin insufficiency, either relative or absolute. There is a great fundamental and clinical difference between relative and absolute insulin insufficiency. The rationale of therapy depends on which type is in predominance. Intrinsic insulin function can largely be rescued in proportion as the relative deficiency overshadows the absolute. This should be exploited clinically. A regime of methodology has been presented.

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**Both of these are published by Spring Company of New York City.

The Art of Using the Insulins in Treatment of Diabetes

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IT IS THIRTY years since insulin was made available for the treatment of diabetes mellitus and it might be well to briefly review the history of its use since 1923 until the present time. The first insulin, now known as unmodified insulin, was produced in one strength, H-10 and had a rather rapid action but its useful duration was only about six hours so that multiple daily doses, usually two to four, were necessary for control of the disease. The first change in this insulin was an increase in the potency of the unit by about 30 per cent to its present U-unit strength.

This unmodified insulin was in sole use until 1936, when protamine zinc insulin became available and for the first time, it was possible to control some cases of the disease by one dose of insulin daily. However, protamine zinc insulin has two disadvantages when used as a single dose treatment. While its span of action is somewhat over twenty-four hours, the onset of its action is so slow that hyperglycemia is apt to occur for from two to four hours after its injection unless the first meal, usually breakfast, is greatly restricted in carbohydrate content. Its second drawback is the fact that its blood sugar-reducing action extends to practically the end of twenty-four hours and early morning hypoglycemic reactions are prone to occur unless a bedtime carbohydrate feeding is taken.

Globin insulin became available in this country in the late 1930's after having been used for some time in Canada and Great Britain. It is an intermediate insulin, having an action of from fourteen to twenty hours and has some advantages over protamine zinc insulin. Its action is more prompt in appearing after injection and its blood-sugar reducing action wanes after the above interval, thereby obviating the risk of early morning reactions. However, in a case of any severity, this waning effect during the night leads to high fasting blood sugar readings and the patient has a poor start on his day. It is useful in cases requiring small dosage and, sometimes in very young patients. One other disadvantage is the likelihood of hypoglycemic reactions in late afternoon.

Zinc insulin crystals was later made available and its action is much the same as unmodified insulin, though its duration of action is slightly longer. In general, these insulins may be used interchangeably.

Thus, by 1940, we had four insulins at our command but none of them was entirely satisfactory. Various attempts were made to combine protamine zinc insulin with booster doses of unmodified insulin or two daily doses of globin insulin were given. Dr. Collip and others experimented with mixing protamine zinc with unmodified or crystalline Insulin in various proportions in one daily morning injection. They found that many cases were rather well controlled by a single dose of these mixtures in a ratio of one unit of protamine zinc insulin to two units of one of the above insulins. While it was rather tedious to mix the two in the syringe, most patients did so without difficulty.

This was in general so satisfactory, that it seemed desirable to produce an insulin with an effect approximating that of this 1:2 mixture. In 1950, the result of this work, NPH Insulin became available and has, to a great extent, replaced all of the earlier insulins in common use. In the usual case of mild or moderately severe diabetes, this insulin is quite satisfactory if properly used.

In treating all cases of diabetes, the diet and its distribution through the day are vitally important while using any insulin. In using the 1:2 mixture or NPH Insulin, it is advisable to allow 20 to 30 per cent of available carbohydrate for breakfast and divide the remaining 70 to 80 per cent between the other two meals. The time interval between meals is important. A factory worker, who has to take his breakfast at 6 a.m. and wait till noon for lunch, will develop hypoglycemia late in the morning unless given a small carbohydrate feeding in the middle of the morning. This usually requires only a small amount of fruit or juice. Noon and evening meals may usually be separated by about six hours without hypoglycemia developing. Bedtime feedings are usually not necessary with these insulins.

This, then is a satisfactory method in controlling the usual case of diabetes in the absence of concurrent diseases or complications of the disease itself. As is well known, these other conditions

may have a marked effect upon the blood sugar. Acute respiratory infections, gastric upsets and diarrhea are common conditions causing wide increases in blood sugar readings and require careful attention. Every patient should be instructed to notify his physician when any of these conditions occur and *not omit his insulin dosage*. It would seem logical that a patient unable to eat due to fever or nausea, should at least reduce his insulin dosage but this is not true. A persistently vomiting patient will show a rapidly rising blood sugar and development of ketones even when he has taken his usual dose of insulin. If he has omitted it, this development is, of course, much more rapid and severe.

When one of these complications occur, it is necessary to make frequent urinalyses in order to control, as far as possible, the tendency to acidosis. In the presence of glycosuria of more than a trace, booster doses of a rapid acting insulin, either unmodified or crystalline, should be given at intervals of two to six hours. The frequency and size of dose will depend upon the amount of glycosuria and the severity of the diabetes in the individual patient. Thus, the dose will vary from 5 to 20 units. Treatment of the complication is, of course, carried on concurrently.

There are several methods of controlling the disease through severe illness, postpartum or postoperative. Probably the simplest is to use one of the rapid acting insulins every four to six hours, the dose being regulated by the degree of glycosuria. This is usually quite satisfactory in patients with normal cardiorenalsystems. Poor kidney function, as shown by albuminuria or high nonprotein nitrogen level is apt to raise the renal threshold so that glycosuria does not occur at the usual blood sugar levels. In these cases, frequent blood sugar determinations are our only method of estimating proper insulin dosage. If glucose is to be given by hypodermoclysis or intravenously, a rapid acting insulin should be given in a dose of about 1 unit to 2 gm. of glucose.

In conclusion, it should be stated that from 25 to 40 per cent of diabetics can be controlled without the use of insulin, particularly those falling under the category of the elderly obese, whose diabetes is discovered within a few weeks or months after the onset of symptoms. For those, who do need insulin, most cases can be well controlled by a single dose of NPH insulin. A method of controlling the disease through emergencies or complications has been outlined.

FUNCTIONAL REHABILITATION IN DIABETES

(Continued from Page 1085)

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Diabetes and Tuberculosis

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THERE is little doubt that the coexistence of diabetes mellitus and pulmonary tuberculosis constitutes a formidable problem. Reviewing the therapy of these two diseases in the past ten to fifteen years, one is impressed with the radical changes that have occurred in the treatment of tuberculosis. Collapse therapy in the form of artificial pneumothorax, phrenic nerve surgery and pneumoperitoneum have yielded to long-term chemotherapy followed in selected cases by resection or thoracoplasty. Since 1947, chemotherapy and antibiotics have become routine procedures. In the field of diabetes, however, less radical changes have occurred. There has been an increased appreciation of better nutrition for the diabetic manifested by more generous protein and carbohydrate allowances in the diet. Insulin has been modified so that five types, varying in time potential, are available to be used singly or in combinations. Hence, there is a broader scope with this agent for the various grades of severity encountered in diabetes. The fundamental treatment of diabetes is still based on adequate diet and the proper use of insulin.

Only a few articles on the combined problem of diabetes and tuberculosis have appeared in the recent literature. Noteworthy among these is the comprehensive survey by Dillon, Boucot and Associates[2] wherein they screened 3,100 diabetics in the Philadelphia area. They found an incidence of tuberculosis of 8.4 per cent in the diabetic compared with 4.3 per cent in an industrial, nondiabetic group as controls. Melvin and Engelhardt[3] state that since the contacts of diabetics to tuberculosis is no greater than that of nondiabetics, it follows that there is a more pronounced diathesis in the diabetic for tuberculosis. Banyai and Eaddin[1] report a rising incidence of the associated diseases from 1919 to 1944, and discuss theories for the increased susceptibility of the diabetic to tuberculosis. Of 115 cases, they report 47 per cent of moderately advanced improved at discharge and 53 per cent dead. In their far advanced group, 15 per cent were improved and 85 per cent dead at discharge.

This study covers 294 consecutive discharges of tuberculous diabetic patients at Herman Kiefer Hospital, Detroit, from 1940 to early 1952. This is compared with a control group of 323 nondiabetic tuberculous patients. A follow-up extending a total of twelve years, averaging five and one-half years is made in each category. The severity of the diabetes is based on the average insulin dosage during hospitalization as well as on the smoothness of diabetes control. The classification of the tuberculosis is that made on admission to the hospital.

Onset of Tuberculosis

Diabetes preceded the tuberculosis in slightly more than half: 51 per cent of living and 56 per cent of dead. Tuberculosis antedated the diabetes in only 10 per cent. Simultaneous discovery of the two diseases occurred in about a third. When analyzed for age of onset, this group was quite scattered, the majority falling between forty-five and sixty years of age. Twenty-five per cent of patients with moderate and far advanced tuberculosis had diabetes of ten to fourteen years duration. Thirty-one per cent of patients living and 35 per cent of the dead had diabetes over ten years duration. Colored patients tended to have short-term diabetes as well as tuberculosis.

Diabetes

The majority of patients were admitted with diabetes in good to fair control. Younger patients (under forty years of age) tended to have more severe diabetes based on larger insulin requirements. The severity of the diabetes in this study was not a deciding factor in the outcome since of those living at discharge, 50 per cent had severe diabetes while of those dying, only one-third had severe diabetes.

The general plan of diabetic management is as follows: If the patient was admitted with a known diet and insulin dosage, this was continued with changes made when necessary. Otherwise an initial diet of protein 80 gm., fat 100 gm., and carbohydrate 150 gm., totaling 1,800 calories was prescribed. Insulin was given according to the usual

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TABLE I. ADMISSION CLASSIFICATION OF PULMONARY TUBERCULOSIS IN THE DIABETIC

Class	Living	Dead	Per Cent of Total
Minimal	10%	37%	7%
Mod. Advanced	44%	18%	28%
Far Advanced	46%	79%	65%

TABLE II. TREATMENT OF TUBERCULOSIS IN THE DIABETIC

Procedure	Living	Dead
Bed Rest only	28%	61%
Thoracoplasty	14%	8%
Resection	4% (5)	0
Pneumonectomy	1.6% (2)	.6% (1)
Other	52.4%	31%
Chemotherapy	42%	13%

* Young white woman died of postoperative alkalosis.

criteria for its use. The diet was then increased according to the patient's tolerance both by appetite and his ability to utilize more food. Over half the patients were underweight on admission and generally gained during their stay. An attempt was made to approximate the standard weight for height and age as often as possible. Those grossly overweight were reduced to standard levels slowly. Over the years, the diet prescriptions have kept pace with the trend prevailing throughout the country. Protein ranged from 85 to 100 gm. Two-thirds of the group received carbohydrate over 150 gm. Fat tended to be less than 130 gm. All types of insulin were used. Protamine zinc insulin alone or supplemented by a separate dose of quick-acting crystalline zinc insulin was used in well over half the cases. More recently, NPH insulin has found increased usage. Globin insulin has been effective in two doses daily. Multiple doses of quick-acting insulin predominated in the group that died because of the fickleness of the appetite and the diabetes in the critically ill patient.

In general, good diabetic control was obtained in the living and had been obtained in those who died at discharge. Difficult control was encountered in 40 per cent of those living and 43 per cent of those dying. Those patients having fulminating complications, particularly with high fever, reflected this state in somewhat more difficult diabetic management. We believe that the tuberculosis had little effect on the diabetic control in the majority of patients. Tuberculosis as an infectious process does not appear to affect diabetes as much as other non-tuberculous infections such as carbuncle, common cold, and the like.

Diabetic Complications

Cardiovascular complications such as coronary artery disease, retinopathy and renal involvement predominated in the non-tuberculous complications. Eighty per cent of those having diabetes over five years had cardiovascular manifestations. The majority in this group were over fifty years of age. Sixteen per cent of those living at discharge had this complication compared with 24 per cent of those who died.

Coma

Coma is a waning complication of diabetes. Only seven of this group had coma on admission. More may have had it and were treated elsewhere before being transferred to Herman Kiefer Hospital. This data was difficult to cull from the histories. Despite the fact that the younger diabetics tended to have more severe diabetes, only one under fifty years of age had coma; the other six cases occurred in those over fifty. Six of the patients admitted in coma had far advanced tuberculosis and died within six months. Half of the patients admitted in coma had cardiovascular complications. Of the seven patients, four died of coma, three of tuberculosis.

Tuberculosis

Classification of pulmonary tuberculosis is presented in Table I.

The distribution in the control group is not listed since they were chosen for severity of tuberculosis in the same proportion per year as the case study group. It will be noted that two-thirds had far advanced disease. In the group dying, the far advanced cases were overwhelming. It is of interest, however, that in the living, the distribution between far advanced and moderately advanced is about even.

Patients with mild diabetes tended to have cavity formation as well as those with moderate and severe diabetes. Two-thirds of the mild diabetics had cavity formation while three-fourths of severe diabetics had cavities. Thus there is no predictable correlation between severity of diabetes and extent of tuberculosis.

Treatment of Tuberculosis

Treatment of tuberculosis in the diabetic has followed the trend mentioned above. The presence

of diabetes did not influence the choice of procedure. Those patients requiring surgery received it. Since there usually was no emergency action required. the procedure was undertaken when the patient was in the best diabetic control under the circumstances. The distribution of procedures is listed in Table II.

The significance of Table II rests in the fact that many of the diabetics had pulmonary disease too far advanced to be eligible for surgery. Those surviving with bed rest only included patients with minimal lesions; some had moderately advanced; some had pleurisy with effusion and extra pulmonary tuberculosis. Some of these also received short courses of antibiotics. Resection by definition included wedge and segmental procedures and lobes but less than pneumonectomy. "Other" procedures included surgery for extra pulmonary disease as bone fusions, genito-urinary operations, fistulectomy, et cetera.

TABLE III. DIABETES AND TUBERCULOSIS
THE EFFECT OF STREPTOMYCIN AND PARAMINOSALICYLIC ACID ON STATUS

	White Male		White Female		Colored Male		Colored Female	
1940 to 1946	Living	Dead	Living	Dead	Living	Dead	Living	D3ad
	27	58	19	38	1	9	3	12
	STREPTOMYCIN—PARAMINOSALICYLIC ACID ERA							
1947 to 1952	43	29	22	16	4	3	4	7

	Total	Living	Dead
Before		50 (30%)	117 (70%)
After		73 (57%)	54 (43%)

Chemotherapy

Chemotherapy has been used at Herman Kiefer Hospital since 1947 (the past five of the twelve years of the study), chiefly as streptomycin and paraminosalicyclic acid. Isoniazid is now being used but was not available for the period covered in this report.

The early use of streptomycin and paraminosalicylic acid tended to be in selected cases—those having the most favorable prognosis, and then in short-term courses. Later it was given to every patient, and it is now appreciated that the long-term use is preferable. Twenty-five per cent of the total group received chemotherapy: 42 per cent of those living and 13 per cent of those dead. No deleterious effect from chemotherapy was found on the diabetic state, and no improvement in the diabetes was detected that could not have been attributed to the general improvement of the patient. Chemotherapy was stopped in only one instance due to eighth nerve involvement. The results of chemotherapy are shown in Table III.

TABLE IV. DIABETES AND TUBERCULOSIS

Mortality

TB.—Diabetes (294 cases)	Controls (323 cases)
At Discharge	
Living—55%	77%
Dead —45%	23%
At Follow-up	
Living—42%	59%
Dead —58%	41%

Thus, prior to the antibiotic era 70 per cent of patients with combined diabetes and tuberculosis succumbed at discharge. The use of these agents has cut this mortality nearly in half. In many instances short courses of Streptomycin-Paraminosalicylic Acid were used. It is expected this figure will improve considerably with more long-term usage and the advent of isoniazid.

Mortality

The mortality findings in this study are summarized in Table IV.

Thus, the over-all death rate for tuberculoiss diabetics in this study was 58 per cent compared with 41 per cent in the non-diabetic tuberculous patients. It will be noted there is a relatively

higher cumulative mortality after follow-up in the non-diabetic patient. A possible explanation may rest in the fact that there is a tendency to retain the diabetic in the hospital longer. The few survivors among the diabetics may represent a relatively resistant group.

A peculiar finding occurred in the white male tuberculous diabetic. In the general population, diabetes in white women increases almost three to one over men after fifty years of age. It is generally known that the tuberculosis curve for both sexes rises after fifty years of age.[4] Thirty per cent of the tuberculous diabetics were white men over fifty years whereas only 14 per cent of the controls were white men over fifty. Whites, among diabetics in this survey are presumably more predisposed to tuberculosis and this predisposition appears to occur over fifty years of age. In the colored group the patients were younger and were conspicuously absent in the over fifty group both in those living and dying.

With the trend of tuberculosis and diabetes incidence rising in the older white female, it would be expected that this situation would be reflected in the white female in this study. Since this did not appear it would indicate that the elderly white male diabetic is the present major victim of tuberculosis.

Detection of Diabetes and Tuberculosis

It was rare in this group of patients to find a diabetic among the tuberculosis patients who was so mild as to be discovered by elevated blood sugar alone. We believe that any tuberculosis patient with a history of diabetes in the family or who has been obese should be carefully investigated for diabetes. In most instances the unknown diabetic in this group was detected because of glycosuria.

On the other hand, the diabetic at all times should be checked for tuberculosis. This means a tuberculin test at least annually in the younger patients and ideally an annual chest x-ray in the adult. Unexpected weight loss, temperature elevation, cough or unexplained loss of control in the diabetic demands an x-ray of the lungs. The occurrence of coma or ketosis in the diabetic, whatsoever the cause, demands a chest film regardless of how recently one may have been taken.

Summary

A study of 294 tuberculous diabetic patients is presented.

Whites among diabetics are predisposed to tuberculosis especially the older men.

Good diabetic control was achieved in 75 per cent of the group.

Tuberculosis had relatively little effect on the diabetic status except during fulminating complications.

The majority of those dying had far advanced tuberculosis on admission.

The diabetic patient received full benefit of current treatment for tuberculosis.

Chemotherapy has reduced the mortality in the tuberculous diabetic patient by nearly 50 per cent.

The over-all mortality was 58 per cent for the diabetic compared with 41 per cent for the non-diabetic with tuberculosis.

A high index of suspicion for tuberculosis is mandatory in all diabetics.

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NEED FOR MODERN METHODS IN TUBERCULOSIS CONTROL

Notwithstanding the reductions in tuberculosis mortality, there is a sizable task ahead before the disease may be considered completely under control. This task would be facilitated if some community in which the disease is still a major problem undertook a project to show how this could be done most effectively under present conditions. The methods evolved should be capable of utilization widely, very much as the Framingham Demonstration set the pattern over thirty years ago. —Louis I. Dublin, A 40-Year Campaign Against Tuberculosis, Metropolitan Life Insurance Company, 1952.

The Kimmelstiel-Wilson Syndrome

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IN 1936 Kimmelstiel and Wilson demonstrated the pathological findings at autopsy of kidneys presenting unusual glomerular lesions. Seven of the eight patients had a clear-cut history of diabetes mellitus. This disease, though not determined in the eighth case, could not be definitely ruled out. The kidney lesions were described as spherical-shaped nodular masses of hyaline material occurring in the center of the glomerular lobules. These investigators considered the findings to be a pathological entity and called it intercapillary glomerulosclerosis. In the past seventeen years since this initial description a vast and often confusing literature has accumulated concerning intercapillary glomerulosclerosis, or the Kimmelstiel-Wilson syndrome, as it has become known.

The pathogenesis of the lesions, the actual pathology, the specificity of the pathological finding with relation to diabetes, and the relative importance of many of the clinical features of the syndrome are not commonly agreed upon. With these facts in mind it is the purpose of this paper to clarify some of the apparent discrepancies.

Pathology

While described by the original investigators as hyalinization of the intercapillary connective tissue, this is not considered the essential pathology today. Bell,[2] and, independently, Allen[1] have described the hyaline material as originating in the capillary walls from a splitting of the inner basement membrane. Bell, in fact, states that there are no connective tissue cells in the intercapillary spaces and that the glomerular capillaries are held together by the glomerular epithelial cells. Many other investigators support this view.

There are two histologic forms of the hyaline material, nodular and diffuse. Kimmelstiel and Wilson[5] described the nodular type but the diffuse form occurs with greater frequency. Either may occur alone or both may be present in the same glomerulus. It is significant that the presence of appreciable numbers of affected glomeruli are almost pathognomonic of diabetes mellitus. Occasionally at autopsy in a non-diabetic patient there has been reported slight involvement of the kidneys with this hyaline material, but advanced lesions have not been reported in the absence of diabetes mellitus. Further proof of the specificity of the lesion is found in its occurrence in the experimental diabetic animals of Lukens and Dohan.

The actual chemical composition of the hyaline material is unknown. The most recent work by McManus[6] using the periodic acid Schiff's reagent seems to indicate that the hyaline material originated in the blood and is probably deposited during the process of filtration. Other recent investigations identify the hyaline as a mucopolysaccharide. This material has been shown to be different in chemical composition from the hyaline masses so frequently seen in the pancreatic cells of diabetic patients. Further, it has been shown not to be glycogen, lipid or amyloid. It closely resembles, if it is not identical with, the material seen in the saccular microaneurysms of diabetic retinopathy.

Kimmelstiel-Wilson renal lesions are found in about 17 per cent of all diabetics. The incidence is two to one in women as against men. It practically never occurs in the first two decades. Most often the lesions have their onset after thirty and reach a maximum incidence between fifty and sixty years of age.

The Clinical Findings

At the time the pathological lesions were first described as an entity, it was felt that associated with the microscopic renal changes there was a specific clinical picture. This is illustrated by the following quotation from the original article of Kimmelstiel and Wilson. "The clinical picture appears in fact to be almost as characteristic as the histological one: the patients are relatively old, hypertension is present, usually of the benign type, and the kidneys frequently show signs of decompensation; there is a history of diabetes usually of long standing; the presenting symptoms may be those of edema of the nephrotic type, renal decompensation, or heart failure; the urine contains large amounts of albumin, and there is usually impairment of concentrating power with or without nitrogen retention."

In direct opposition to the view quoted above is that of Siegal and Allen[9] who found no constant clinical picture associated with the Kimmelstiel-Wilson lesions in the kidney. They felt, however, that occasionally symptomatology may be distinctive enough to warrant the diagnosis.

The experience of Bell of Minnesota expresses the feeling of the majority of observers. He found that the presence of hypertension and uremia in a diabetic patient usually justifies the diagnosis of intercapillary glomerulosclerosis.

There is a constant search for refinements in diagnosis that will allow the clinical recognition of this syndrome. The New York group of Rifkin, Leiter and Berkman[7] lay great stress on the study of the urinary sediment. Frequently the sediment shows doubly refractile droplets in renal cells or casts containing cholesterol esters in addition to neutral fats. These investigators found anisotropic cells and casts in forty of forty-four cases in which the clinical diagnosis of the Kimmelstiel-Wilson syndrome was made. Histologically at autopsy doubly refractile material was found in the renal tubular epithelium of all four cases in which it was not seen in the urinary sediment. The amount of doubly refractile lipoid material varies from day to day. A rather careful search is necessary to demonstrate the material. Anisotropic substances are poorly preserved and difficult to show in alkaline urine. They are best exhibited in a concentrated acid urine. Careful examinaton of many urinary sediments from patients with a variety of kidney ailments was undertaken. These included many conditions often found associated with diabetes mellitus, such as urinary tract infections, generalized arteriosclerosis, and hypertensive cardiovascular-renal disease. In no instance was doubly refractile lipoid material present. While this material is undoubtedly encountered in most cases of intercapillary glomerulosclerosis there are also other conditions in which it is present. These include all cases of the nephrotic syndrome whether due to glomerulonephritis, lipoid nephrosis, lues, or thrombosis of the renal vein. Certainly the presence of anisotropic material is not pathognomonic of the Kimmelstiel-Wilson syndrome. Some recent investigations of electrophoretic patterns of serum proteins give promise of being of diagnostic value. Ten patients with clinically suspected intercapillary glomerulosclerosis, of whom six subsequently came to autopsy with confirmation of the diagnosis, were studied and all showed a significant elevation of the Alpha 2 globulin peak with a decrease in the albumin peak. This was not present in diabetes mellitus in which there were no kidney lesions. The results are similar to those found in the well developed nephrotic phase of glomerulonephritis. In this latter disease, however, the gamma globulin is decreased which did not obtain in the ten cases studied. Obviously, more work must be done before significant conclusions may be drawn, but the results in the studied cases are suggestive.

When all of the clinical features of severe nephrosis with renal failure are present in a patient who has had diabetes mellitus for many years, it is presumed that the patient's kidneys will present on microscopic examination the nodular or diffuse hyaline changes of intercapillary glomerulosclerosis. This occurs in only about 6 per cent of all cases of the syndrome proved at autopsy. The clinical diagnosis cannot be established with certainty in the absence of any of the individual findings. Hypertension, edema, albuminuria, hypoproteinemia, diabetic retinitis, and arteriosclerosis may be individually present in patients with diabetes without the findings of glomerulosclerosis. To label every case of proteinuria in a diabetic of long standing as a likely case of Kimmelstiel-Wilson disease will lead to a large percentage of errors.

An interesting feature of the development of the severe renal lesions of this disease is the clinical improvement of the affected patient's diabetes. This has been rcognized a number of times. It has been commented on frequently but no adequate explanation has been offered. Often these patients show a marked diminution in their need for insulin. That this is not merely an evidence of glomerular failure where glucose is not filtered out of the blood stream, is shown by an actual fall in the blood level for glucose. The diabetes is truly ameliorated though it does not completely disappear.

Some recent investigative work offers a possible solution for this anomaly. While studying the fate of insulin in the body and attempting to find its site and mode of action it was noted that this hormone was concentrated in large amounts in the liver and kidney of experimental animals and there destroyed. This was ascertained by labeling insulin with radioactive iodine, I^{-131}, at the tyrosin rings and testing for its localization in the body. Because the renal function is markedly diminished in advanced intercapillary glomerulosclerosis it was felt that insulin which is destroyed in appreciable amounts by the normal kidney was not disturbed. Thus this insulin is allowed to exert its effect in the peripheral utilization of carbohydrate.

Treatment

The treatment of intercapillary glomerulosclerosis is completely unsatisfactory. In our present knowledge there is no known method of reversing the hyaline changes in the kidney. Engelberg, working in Gofman's laboratory, studied seventeen cases of clinically suspected glomerulosclerosis from the standpoint of the presence of abnormal amounts of SF 10-20 lipoproteins on ultracentrifugation of the serum. Five of these cases subsequently died, and were autopsied proving the diagnosis. He became interested in this investigation because of the presence of a large number of patients with Kimmelstiel-Wilson syndrome showing high blood cholesterol as well as arteriosclerosis and doubly refractile bodies in the urine.

He found marked elevation of the SF 10-20 class of lipoproteins in all the patients whom he studied with the Kimmelstiel-Wilson syndrome. A large percentage of these patients also showed elevation of the SF 20-35 class of lipoproteins. From this data it was suggested that these classes of lipoproteins may play a role in the production of the lesion. It was further suggested that elevation of SF 10-20 proteins may be an early finding by means of which the development of glomerulosclerosis might be predicted. From this data the therapeutic use of intravenous heparin in doses of 100 mg. daily for long periods of time might be tried. It has been shown that heparin used in this manner has reduced the amount of SF 10-20 lipoproteins in the blood.

In the absence of specific therapy, symptomatic care and supportive management of the patient is indicated. This includes, of course, the usual management of cardiac failure, hypoproteinemia, hypertension, edema, albuminuria, retinal changes, peripheral vascular disease, and uremia, as well as the necessary treatment for the control of carbohydrate metabolism. Diet may become a difficult problem in cases requiring low salt and high protein as well as restriction of carbohydrates.

Digitalis is used where indicated.

Mercurial diuretics may be used as long as they are effective. Acid salts such as ammonium chloride may be of value in the absence of acidosis. Rutin, hesperidin, and other substances of this type have not been particularly useful. The outlook in the fully developed syndrome is bad and patients die within a relatively short time, usually not more than two years.

Comment

As the medical profession has become familiar with the syndrome of intercapillary glomerulosclerosis there has been a tendency to label all cases of renal abnormalities in a diabetic as Kimmelstiel-Wilson disease. This results in large percentages of error from the clinical standpoint. The diabetic may suffer any form of renal disease which may occur independently of or in conjunction with intercapillary glomerulosclerosis.

Pyelitis, glomerulonephritis, lipoid nephrosis, renal malformations or tumors are often seen in association with diabetes. Acute necrotizing papillitis is a severe renal lesion which when present is practically always associated with diabetes mellitus. This lesion does not show the glomerular pathology of Kimmelstiel-Wilson disease.

The hyaline changes in the glomerulus when present in advanced degree are pathognomonic of diabetes mellitus. These changes may be suspected clinically when a patient with diabetes mellitus of long duration presents a full blown picture of nephrosis. In the absence of these clinical findings the presence of isolated evidences of renal disease can only alert the examiner to the possibility of intercapillary glomerulosclerosis, but in no sense is the clinical diagnosis certain.

Summary

1. Some of the features of intercapillary glomerulosclerosis are discussed from the standpoint of history, pathology, pathogenesis, clinical findings, prognosis and treatment.

2. It is pointed out that this is a pathologic entity rather than an easily recognized clinical syndrome.

3. The structural histologic changes can be predicted with a fair degree of accuracy in the presence of the full blown nephrotic syndrome. This occurs in a relatively few cases.

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Fructose Metabolism in Diabetes

Clinical Applications

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A LONG STANDING controversy has existed regarding the desirability of administration of glucose early in the management of diabetic acidosis. Those who have advocated its use[1,9,10,14,19] have insisted that the prime aim of therapy is rapid restoration toward normal of carbohydrate metabolism, thus reversing quickly the ketotic process; and that to accomplish this purpose glucose must be restored to the carbohydrate-starved body. A very recent study[17] supports their contention that administered glucose plus insulin produces a faster fall in blood ketones than does saline and insulin. These groups of investigators persist in their belief that glucose is superior to saline early in the treatment of ketotic acidosis.

On the other hand, those who oppose the early use of glucose claim (a) that it increases insulin resistance[16] and (b) that it prolongs hyperglycemia, thus perpetuating glycosuria and polyuria which in turn lead to continued and life-endangering dehydration of the patient.[8] This side does not claim, therefore, that saline is *better* than glucose in the reversal of ketosis *per se*, but rather that saline is *less dangerous* than glucose during the initial hours of treatment. An important reason for the continued lack of agreement is that each side has been arguing a different issue. Actually, the choice has really depended upon whether one prefers the advantages of early administration of glucose more than he fears its disadvantages.

A solution of this controversy is now at hand. Recent intensive investigation of the metabolism of fructose in normal subjects and in diabetics reveals, among other things, that the use of fructose early in the treatment of diabetic acidosis yields all of the advantages of glucose with none of its disadvantages. The purpose of this review is to summarize briefly and simply these studies on fructose metabolism, particularly as they apply in the treatment of diabetes and diabetic ketosis.

When ordinary cane sugar, the disaccharide sucrose, is hydrolyzed it is split into equal parts

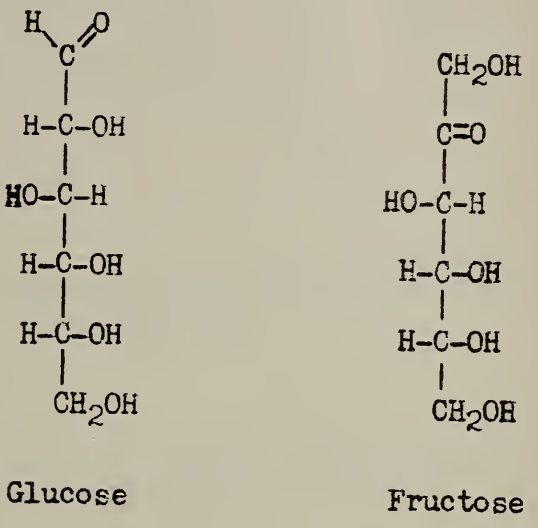


Fig. 1. Structural formulae of glucose and fructose.

of its two component monosaccharides, glucose and fructose. These two sugars have somewhat similar structural formulae, as shown by Figure 1. However, they differ importantly with respect to an interesting step in their metabolic pathways. Briefly stated, glucose requires the presence of insulin for its utilization while fructose does not.

In 1926 Cori[2] demonstrated that the first step in the metabolism of glucose is its phosphorylation to glucose-6-phosphate. This reaction is catalyzed by the enzyme glucokinase:

$$\text{Glucose} + \underset{\text{(ATP)}}{\text{Adenosine triphosphate}} \rightarrow \underset{\text{(glucokinase)}}{\text{Glucose-6-phosphate}} + \underset{\text{(ADP)}}{\text{Adenosine diphosphate}}$$

In order, however, for glucokinase to catalyze this reaction insulin must be present. If insulin is absent, or present in insufficient quantity, phosphorylation is inhibited. Further utilization of glucose is blocked at this point.

Similarly, the initial step in the utilization of fructose is mediated by its specific enzyme, fructokinase:

$$\text{Fructose} + \text{ATP} \rightarrow \underset{\text{(fructokinase)}}{\text{Fructose-6-phosphate}} + \text{ADP}$$

The important difference, however, also reported

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by Cori in 1926,[2] is that this reaction proceeds whether or not insulin is present.

The incorporation of both glucose and fructose into the cycle of carbohydrate metabolism is shown in Figure 2. In the presence of sufficient insulin glucose is first phosphorylated and is then either utilized directly in the peripheral tissues as a source of energy (A), stored in the liver or muscles as glycogen (B), or converted into fat (C) and stored. Liver glycogen can be converted back to glucose (D) to re-enter the same cycle. At the same time fructose, even without insulin, can go through the identical cycle, including storage in the liver as glycogen. Moreover, it is known that hepatic glycogen is actually formed much more rapidly from fructose than from glucose.[2,15,20] However, when this glycogen formed from fructose is broken down in the liver it emerges as glucose, not fructose, and insulin is then required to re-incorporate it into the metabolic cycle.

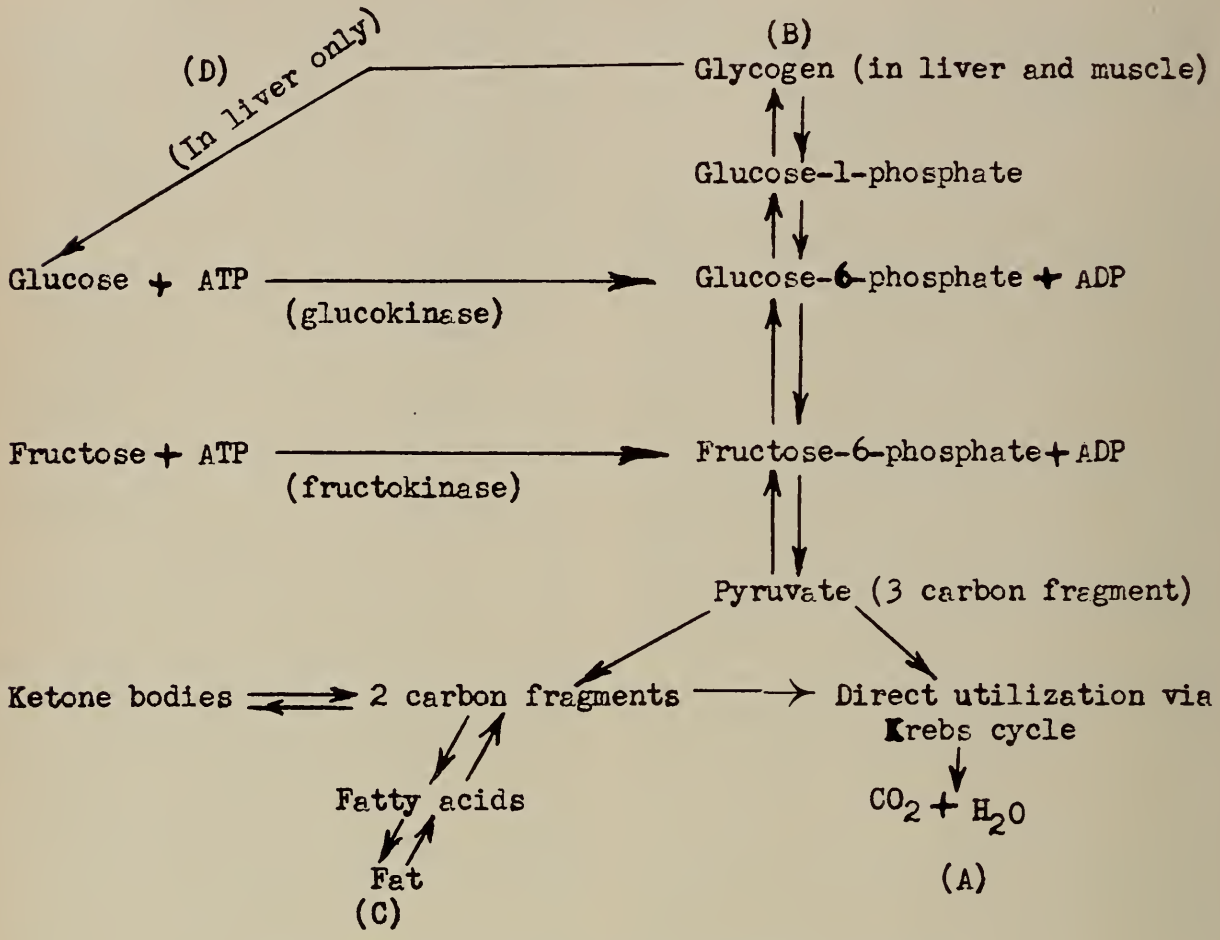


Fig. 2. Simplified scheme of cycle of carbohydrate metabolism.

In 1950 Weinstein[23,24] reported that intravenously administered invert sugar (hydrolyzed sucrose, a 10 per cent solution of which contains 5 per cent glucose and 5 per cent fructose) produced significantly less glycosuria than a similar concentration of glucose. In the same year Weichselbaum, Elman and Lund[22] compared the rates of utilization of intravenously administered 10 per cent glucose and 10 per cent fructose. They found a strikingly increased speed of assimilation of fructose over glucose, as manifested by lower blood sugar levels, decreased glycosuria and decreased water diuresis. They were interested primarily in parenteral alimentation of surgical patients and concluded that fructose is a better utilized sugar than glucose for intravenous feeding. One of their ten patients happened to be a mild diabetic. In this patient 25 gm. of the 100 gm. of administered glucose was excreted in 1900 cc. of urine, while only 2.4 gm. of 100 gm. of intravenous fructose was excreted in 720 cc. of urine.

These preliminary findings stimulated other in-

TABLE I. COMPARISON OF THE EFFECTS OF INTRAVENOUS GLUCOSE AND FRUCTOSE INFUSED AT A RATE OF 1 GM. PER KILOGRAM FOR ONE HOUR INTO THREE NORMAL SUBJECTS AND FIVE DIABETIC PATIENTS.

	Intravenous Glucose			Intravenous Fructose					
	Maximum blood glucose (mg. %)	Glucose excretion (grams)	Urine volume (c. c.)	Maximum blood glucose (mg. %)	Maximum blood fructose (mg. %)	Total sugar excretion (grams)	Fructose excretion (grams)	Glucose excretion (grams)	Urine volume (c. c.)
Normals	253	6.1	1130	98	83	4.4	4.3	0.1	775
Diabetics	543	26.9	731	337	76	16.6	3.7	12.9	837

Taken from the data of Miller et al [15]

vestigators to more detailed comparison of the metabolism of glucose and fructose both in normal subjects and in diabetics. This work has culminated in the demonstration that fructose has much to offer in the treatment of diabetic acidosis.

Miller and his associates[12] gave alternate infusions of glucose and fructose to both normal subjects and diabetics at the rate of 1 gm. per kilogram over a sixty-minute period. As shown in Table I, when glucose was given to normals the average peak blood sugar was 253 mg. per cent, the mean excretion of glucose was 6.1 gm., and the average urine volume for three hours after the start of the infusion was 1130 cc. By contrast, fructose infused into normal subjects disappeared much more rapidly than glucose. The average maximum blood glucose level was 98 mg. per cent, the mean peak blood fructose level was 83 mg. per cent, the average excretion of total sugar was 4.4 gm. (4.3 gm. fructose and 0.1 gm. glucose) and the average urine volume was 775 cc. Miller pointed out that there is no renal threshold for fructose, since significant fructosuria was found even at blood levels as low as 4 mg. per cent. When glucose was infused at the same rate in diabetics from whom insulin had been withdrawn temporarily, the average maximum blood glucose level was 543 mg. per cent, the average glucose excretion was 26.9 gm., and the average urine volume was 731 cc. When fructose was given to these same patients the mean peak glucose level was 337 mg. per cent and the average maximum fructose level was 76 mg. per cent. However, although the average total sugar excretion was only 16.6 gm. (3.7 gm. fructose and 12.9 gm. glucose), the average diuresis was 837 cc. This failure of urine volume to parallel the decrease in total sugar excretion was unexplained. It was noted that in diabetics fructose disappeared from the blood stream at the same rate as in nondiabetics, since the blood levels of fructose and the amount of fructose excretion were essentially the same in both groups. Most of the total sugar excretion in these diabetics, from whom insulin had been withheld, was glucose. Thus the metabolism of fructose differs from that of glucose in both normal and diabetic subjects. Further, the metabolism of fructose in the diabetic is similar to that observed in the normal person. This latter point has been established in addition by means of hepatic-vein catheterization studies.[4]

Similar findings have been reported by Smith, Ettinger and Seligson,[18] who observed only minor differences between the intravenous fructose tolerance tests of normals and of diabetics from whom insulin had been withdrawn. The fructose load consisted of 0.5 gm. per kilogram infused over a thirty-minute period. Normal subjects excreted 3.8 per cent, and diabetics excreted 4.1 per cent, of the administered carbohydrate. During intravenous glucose tolerance tests, however, the normals excreted only 2.3 per cent of the infused glucose while the diabetics excreted 13.6 per cent.

Smith and his co-workers[18] demonstrated in man that administration of insulin fails to influence the rate of fructose utilization, an observation made previously in animals by Cori[2,3] and Lundsgaard.[11] When insulin was given to a normal subject receiving a constant infusion of invert sugar, the blood glucose level dropped sharply while the blood fructose level remained unchanged.

Weichselbaum and Daughaday[21] were the first to report on the use of fructose in the treatment of diabetic acidosis. Four patients in severe acidosis received from 0.8 to 2.0 gm. of fructose per kilogram per hour intravenously for one to two hours. In addition to insulin these patients received fluid and electrolyte replacement. The peak fructose blood levels were 43, 63, 74 and 180 mg. per cent respectively, while the glucose blood levels did not change significantly. The rates of carbohydrate retention, based on the total sugar excretion during the infusion and for the ensuing three hours, were 49, 56, 44 and 58 gm. per hour

respectively. These workers then compared the assimilation of glucose and fructose in the complete absence of insulin by administering 0.75 gm. per kilogram of each sugar over a sixty-minute period to a totally depancreatized patient from whom insulin had been withdrawn. Fasting blood sugars ranged from 300 to 418 mg. per cent and ketonuria was present preceding each infusion. Following fructose administration the blood fructose level did not exceed 47 mg. per cent and the blood glucose rose less than 76 mg. per cent above the fasting level. Only 6 per cent of the infused fructose was excreted and the rate of carbohydrate retention was 36 gm. per hour. On the other hand, when glucose was given the blood glucose level rose to 530 mg. per cent, 78 per cent of the administered glucose was excreted during the infusion and the subsequent two hours, and glucose was assimilated at a rate of only 13 gm. per hour.

In recent months there have been several reports attesting to the superiority of fructose over glucose in the early hours of treatment of diabetic acidosis. Darragh, Womersley and Meroney[5] used 2.5 per cent fructose in half-normal saline (each liter containing 500 cc. of 5 per cent fructose in water and 500 cc. of normal saline) as the primary replacement solution in six diabetic ketotic patients. Insulin was used in the usual manner. In all six patients a rapid reduction in blood ketone levels was observed. They noted also a faster decline in total blood sugar levels in these patients than in those who had received 2.5 per cent glucose in the early hours of treatment.

Dolger and his associates[6] demonstrated that fructose offers a unique advantage in the treatment of diabetic acidosis in that it decreases ketone production without aggravating hyperglycemia or glycosuria. They found that in mild ketosis the administration of 100 gm. of fructose intravenously over a four-hour period was sufficient to abolish ketonuria even without the use of insulin. At the same time hyperglycemia was not appreciably increased and glycosuria actually decreased. In severe ketosis insulin was administered in addition to fructose. It was concluded that the use of fructose overcomes the objections which have traditionally been voiced against the early use of glucose. Thus, the use of fructose in the initial treatment of diabetic acidosis does not lead to aggravation of hyperglycemia, nor to increased glycosuria, nor to further dehydration, nor to insulin resistance.

In order to determine whether the administration of carbohydrate in the early treatment of diabetic acidosis actually speeds recovery from ketonemic acidosis, Rosecan and Daughaday[17] induced ketosis by insulin withdrawal and determined the rate of fall of blood ketones during insulin therapy with and without added carbohydrate. Glucose or fructose was administered intravenously at a rate of 0.8 gm. per kilogram per hour for four hours, and similarly acidotic patients as controls were given normal saline. It was found that the addition of carbohydrate to insulin in the early hours of treatment caused a significantly faster fall in blood ketone levels than when only saline and insulin were used, but that no superiority of fructose over glucose in this respect was evidenced in their small series. Fructose was once again superior, however, with respect to the speed and completeness of its assimilation, since total blood sugar was significantly higher when insulin and glucose were used than when insulin and fructose were administered. Seventy-eight per cent of the infused carbohydrate was retained when fructose was given as compared to only 32 per cent when glucose was given.

Miller, Murphy, Craig and Woodward[13] studied the relative effects of glucose and fructose in the first six hours of treatment of diabetic acidosis induced by insulin withdrawal. They observed that fructose enhanced greatly the amount of carbohydrate utilized as compared with the effect of administered glucose. It was shown, further, that during and following the use of fructose, the amounts of water, sodium and potassium in the urine were not significantly greater than those of the control period during which the patient received no added carbohydrate in the treatment of ketosis.

Drucker et al[7] investigated the effect of stress on glucose and fructose metabolism. To test their idea that the relative insulin resistance accompanying the alarm reaction should decrease glucose tolerance without affecting fructose tolerance, they performed intravenous glucose and fructose tolerance tests on surgical patients before and after operation. Similar studies were done on patients with typhoid fever while acutely ill and during convalescence. They found, as anticipated, that the stress of surgery or of an acute febrile illness does decrease glucose tolerance while fructose tolerance

remains unaltered. Failure of the stress of surgery to influence fructose utilization has been confirmed by Dolger,[6] who reported that in the preoperative and postoperative management of diabetic patients with fructose instead of glucose, pre-existing hyperglycemia and glycosuria were not aggravated.

Summary

The fundamental goal in the treatment of diabetic acidosis is rapid restoration of normal carbohydrate metabolism. It is imperative to re-establish direct peripheral oxidation of glucose, and glycogen storage in the liver, as rapidly as possible. The degree to which this can be accomplished will determine the speed with which blood and urinary ketones disappear. It has been shown that this can be effected more quickly by using glucose from the outset than by using saline alone. However, the *improper* use of this sugar has certain intrinsic dangers because glucose, which requires insulin for its utilization, is being given to an insulin-deficient patient. This can result in prolonged hyperglycemia, glycosuria and water diuresis. A sugar which is metabolized normally in the absence of insulin would theoretically be the best carbohydrate to use in the management of diabetic ketosis.

Fructose does not require insulin either for its direct oxidation or for its conversion to glycogen. Independent studies by many investigators confirm the fact that fructose metabolism proceeds at essentially the same rate in normal subjects, in controlled diabetics, and in diabetic acidosis.

These attributes make fructose superior to glucose for use in the early treatment of diabetic acidosis because they result in greater retention and faster utilization of the administered carbohydrate. The rapid utilization of fructose confers upon it several positive advantages over the use of glucose:

(1) Maximal blood sugar levels are lower.
(2) Hyperglycemia subsides more rapidly.
(3) Less total glycosuria occurs.
(4) There ensues more rapid control of polyuria, and thus less dehydration of the patient.

In addition, administration of fructose is superior to the use of saline alone in the management of ketosis since it results in a significantly faster fall in blood ketone levels. Fructose is therefore uniquely fitted for use in the initial hours of treatment of diabetic acidosis. Since it possesses all of the advantages of glucose with none of its disadvantages, the advent of fructose renders the old saline-versus-glucose controversy obsolete.

It is recommended that fructose be used as a 2.5 per cent solution in half-normal saline (each liter to contain 500 cc. of 5 per cent fructose in water and 500 cc. of normal saline). Higher concentrations of fructose can be used, however, without the danger attending the use of higher concentrations of glucose. When the blood sugar drops below 200 mg. per cent*, or when glycosuria disappears, the carbohydrate being infused may be changed from fructose to glucose.

The use of intravenous fructose in place of glucose seems indicated also in diabetic patients who have just undergone surgery, who have febrile illnesses, or who otherwise may be expected to manifest the insulin resistance accompanying the alarm reaction. In such situations the use of 5 per cent or 10 per cent solutions of fructose results in less hyperglycerine and glycosuria. This provides for greater retention of carbohydrate, and of total available calories, than when glucose is used. Moreover, more efficient utilization of this carbohydrate serves as prophylaxis against the development of ketosis.

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*When fructose is used, both the Folin-Wu and the Somogyi-Nelson methods of determining blood sugar yield the total blood sugar level, i.e., the blood levels of fructose plus glucose.

Michigan State Medical Assistants Society

By Mrs. Elizabeth E. Peck
Detroit, Michigan

AS THE demands upon the doctor of medicine increase daily, his need for competent and loyal office personnel increase also. To-day's practice of medicine requires more time from the M.D. than in the past as he attends meetings of his medical organizations, the postgraduate sessions, and specialty conferences, such as cancer, industrial health, et cetera. In order for him to attend these meetings and give his attention to the patients he treats, he must have assistants who are interested and properly trained to aid him.

At the invitation of the Michigan State Medical Society, the Detroit Medical Assistants Society was organized in 1940. Through their efforts the Michigan State Medical Assistants Society came into being.

The Michigan State Medical Assistants Society is composed of city or county medical assistants, each group having an Advisory Board appointed by their county medical society. The Michigan State Medical Society also appoints an Advisory Committee consisting of seven doctors of medicine who direct the activities and policies of the state organization.

The objects of the society as stated by their Constitution and By-Laws are (1) to unite, in an organization, those persons who are employed in offices, of members of the Michigan State Medical Society, hospitals accredited by the American Medical Association and medical laboratories of the State of Michigan, (2) to inspire its members to render honest, loyal, or more efficient service to the profession and to the public which they serve, and (3) to render educational and informative services to its membership.

There is no better employe than a person who feels that he is an integral part of the medical profession. As employers, doctors must compete with industry, but the traditional lure of the medical profession will still attract modern girls to seek this field of employment if they are encouraged.

The demand for special training for the assistant in the office of a doctor becomes more imperative daily. The Michigan State Medical Assistants Society is making a sincere effort to supply speakers from the medical societies and representative companies. These speakers deal with subjects pertinent to the doctor's office and members are better informed today as a result. However, because the organization is non-profit there are not funds for extensive advertising to increase the membership. Therefore, the organization must turn to you, the doctor of medicine and ultimate beneficiary, to help with this purpose. To date there are constituent societies in Allegan, Bay City, Detroit, Grand Rapids, Lansing, Kalamazoo, Muskegon and Saginaw. In Genesee County a new society is now being organized. These cities cover only a small portion of Michigan but with your individual help and interest your medical society could sponsor a group in your county. If you would prevail upon your county officers to start such a group, they would realize the benefits to be derived and would further such a cause.

As additional help to the M.D.s of Michigan the Michigan State Medical Society has outlined an Adult Education Course for Medical Assistants. This course could be offered medical assistants in your community through the public schools. An outline for suggested procedure can be obtained from the offices of the Michigan State Medical Society and any assistance the existing society can give, it will do willingly. This course is designed to give special training to the employed medical assistant. It will increase her value as a public relations representative and give training in office procedures.

The Highland Park Junior College offers a course to students wishing to seek employment in a doctor's office. The course includes the specific training requested by the doctors in the Detroit area and is approved by the Wayne County Medical Society. It is a one-year program and gives training in office procedure, basic laboratory work and nursing arts. The demand for these graduates is so great that the college has several positions available to the student even before she serves her apprenticeship. A similar course could be started in the schools of your city if the M.D.s would show the interest required to start such a program.

Mutual benefits from these programs would make a better physician-employe relationship. The medical assistant need no longer be an unclassified

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The Present State of Tonography

By Peter C. Kronfeld, M.D.

Chicago, Illinois

TONOGRAPHY is a recent refinement of an investigative technique that has been in use in ophthalmology for over twenty-five years. It consists, in principle, of the measurement of the drop in ocular tension that occurs during and as the result of an external, eyeball-indenting force. Tonometers of the Schiötz type serve both purposes, the exertion of an external, eyeball-indenting force and the measurement of the drop in ocular tension. Much of the recent interest in and progress of tonography is due to the appearance on the market of the electronic tonometer of V. Mueller. This instrument has two principal advantages over the regular Schiötz instrument, viz., greater accuracy of the readings and easier maintenance on the examinee's cornea.

The drop in ocular tension occurring while the tonometer rests on the cornea is due to the expulsion of fluid from the eye. All available evidence points in the direction of accelerated outflow of aqueous during the application of the tonometer. The possibility of some diminution in the total blood content of the eye during tonography cannot be ruled out altogether.

The computation and evaluation of the results of tonography has been greatly facilitated by Friedenwald's theoretical analysis and actual measurements of the distention, deformation and indentation of the human eyeball during tonometry. Two sets of Friedenwald's measurements have been particularly helpful in evaluating the results of tonography, viz. the data pertaining to the volume of the indentation produced by the plunger and the data pertaining to the rise in intraocular pressure caused by the application of the tonometer. With the help of these data it is possible to express the drop in tension occurring during tonography in terms of cmm. of fluid expressed per mm. of tonometric increase in intraocular pressure. This mode of expression of the tonographic result has been advocated by Grant, the underlying concept being that the tonometric increase in intraocular pressure acts as the driving force for the accelerated outflow of aqueous. The ratio cubic millimeters of fluid expressed per millimeter of tonmetric rise of intraocular pressure has become known as Grant's coefficient of the facility of aqueous outflow.

In a good many normal eyes the four or five minute tonogram is smooth enough to permit conversion into Grant's coefficient. The facility of the normal eye to give off fluid under these conditions has been found to vary within wide limits. Four independent groups of workers have reported about the same range of variations of Grant's coefficient in normal eyes, viz., from .10 to .44. The test-retest consistency of the coefficient is ± 25 per cent for outpatients and ± 10 per cent under the more sheltered conditions surrounding inpatients. A very interesting physiological disturbance of the aqueous outflow has been found to occur during menstruation (Shahan).

In less than half of the normal eyes tested the tonogram deviates appreciably from the usual smooth curve. The interpretation of some of these deviations is facilitated by simultaneous observation of the flow in the aqueous veins. Persistence of accelerated flow in the latter vessels synchronous with an absolute or relative plateau in the tonogram is suggestive of short phases of accelerated secretion or of a blood volume change within the eyeball. These processes are being studied by the writer. Irrespective of the outcome of these studies, there can be no doubt as to existence of a principal difference between a representative group of early chronic glaucomas and a representative group of normal eyes, the former being characterized by a lower coefficient of outflow than the latter. Tonography is thus of distinct diagnostic value, but certain obvious limitations must be recognized.

Since chronic glaucoma probably develops as a gradual deviation from the normal and since the normal range is very wide, a coefficient of outflow of .15 may be perfectly normal for an eye that has never had a higher coefficient; the same coefficient would probably have to be classified as pathological if the eye in question were known to have had a much higher facility of outflow on previous tests.

The low coefficient of outflow characteristic of

(Continued on Page 1105)

From the Department of Ophthalmology, University of Illinois School of Medicine.

Presented before the Eighty-seventh Annual Session, Michigan State Medical Society, Detroit, September 24, 1952.

Shall Basic Science Laws be Repealed or Revised to Contain the Essentials of a Uniform Basic Science Act?

By J. Earl McIntyre, M.D.
Lansing, Michigan

REPEAL of any law is demanded when that law works hardships, inequalities, or fails to serve the purpose for which it was enacted.

Before commenting upon this phase of the question, I hasten to point out that the advisability of these measures relating to healing arts involves consideration, not of the convenience or personal economic fortunes of practitioners, but of the health and welfare of the people. The boards of the respective healing groups are created not to protect doctors, but to protect the public. The very thesis of basic science legislation is the screening of the unfit from the field of healing the sick. The admission of those from other states must be determined not by interstate professional pride or sectional jealousy, but by the single question—are they competent to enter our field of healing activities, whether in medicine, osteopathy, chiropractic, or other healing groups.

We must not bar the gates to a highly competent doctor from a sister state merely because that state maintains a "closed shop" for its native sons. Conversely, we should not admit an incompetent doctor from a sister state merely because that state accepts one of our doctors. This amounts to nothing more than plain horse trading and that is what the term "reciprocity" or "reciprocal" has come to mean in the minds of many.

How then can we insure the admission of the qualified doctor by a sound professional and legal test? It is the thought of many of us that the answer lies in uniformity of legislation acceptable to all or most states.

This uniformity provides the desired factor of equivalence. In other words if all or most states require examinations in the same five designated subjects, considered essentially basic, and a passing grade or mark of the same minimum, those states will have adopted virtually equivalent standards for the granting of its basic science certificate. There seems to be little question but that the subjects of Anatomy, Bacteriology, Chemistry, Pathology, and Physiology are the essential basic sciences and that the content of the examinations and the number of questions must also be the same in all states, under the several acts.

As to states having no basic science law or to states which will refuse to adopt or conform to a uniform basic science act, we must say that public opinion would soon bring about adoption. Citizens of state A would not stand by and see its licenses in all healing arts become worthless in most other states and its sons absolutely barred from entering practices in most states. This, one may say, is boycotting of the highest order. Yet, no other solution is legally or practically possible. Waiver of the certificate to licentiates in such states would, we are told by our attorneys, impair the constitutionality of the body of the acts.

A comparative analysis of the basic science laws of the several states containing the basic points which tend to permit or prevent endorsement or waiver privileges between states was prepared and presented by a former president of your association, Doctor Madison, in his paper entitled, "Basic Science Laws, Boards, and Practices in the United States which he read before the Thirty-ninth Annual Congress on Medical Education and Licensure in 1943. I have used this paper in my research, and also his paper on a proposed uniform basic science law read before the Congress in February of 1947, and have quoted from both with his permission. In fact, my research has revealed that during the past twenty years, verbal and written statements of Doctors Bierring, Carter, DuBois, Madison and myself are so much alike in phraseology and wording that any of us could accuse the other of plagiarism.

Is is obvious that we are not providing adequately for equitable distribution of our practitioners and their much-needed services. We must continue to send our medical graduates to all points of the compass to help the sick. They must be properly prepared. Also, so must the non-medical graduate whether he be an osteopath, chiropractor, naturopath, or chiropodist or optometrist who advertises or designates himself as foot or eye doctor or specialist. Once properly

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Read before the American Association of Basic Science Boards at the Annual Congress on Medical Education and Licensure, Chicago, Illinois, February 9, 1953.

Dr. McIntyre is Secretary, Michigan State Board of Registration in Medicine.

prepared, as Doctor Madison has so aptly put it, they should not be held at bay at state boundaries while their mental baggage is inspected by a basic science board.

The project or task of designating and drafting a uniform basic science law to serve as a basis for all states is a large one. The act must be drawn in its basic features and approved by the office of the state attorney general in the matter of interstate endorsements or the waiver clauses.

While I do not propose to submit a formal draft of a proposed uniform basic science act, I do, however, wish to suggest the inclusion of certain essential provisions. Each state must, of course, insert provisions which are consistent with its rules, regulations, and laws governing the structure and form of statutes, such as title, repealing or amending clauses, and must also provide for enforcement and procedures for appeal in accordance with other administrative laws and practices. In some states where the several healing groups are governed by a composite board, the statute creating such composite board must be amended with reference to the basic science law. It is likewise true in the case of statutes governing the separate healing groups.

The following provisions should be included in a uniform basic science act:

1. Requiring a certificate from the basic science board showing that the applicant for licensure has passed an examination in the designated basic science subjects which I have previously named. This certificate to be issued before one is permitted to take an examination for license to practice any of the forms of the healing arts and that such certificate must be held by any person seeking to be admitted to practice by interstate endorsement or waiver privilege.

2. The healing art may be defined as follows: For the purposes of this act, the healing art includes any system, treatment, operation, diagnosis, prescription or practice for the ascertainment, cure, relief, palliation, adjustment, or correction of any human disease, ailment, deformity, injury, or unhealthy or abnormal mental condition.

Note: This definition brings within its scope nonsectarian medicine, chiropractic, naturopathy, osteopathy, sanipractic, and other modes of healing. It is inclusive enough to cover chiropodists, dentists, nurses, optometrists, pharmacists, and others, but provisions to exempt them from the act must be included.

Note: It is suggested and urged by practitioners of the healing arts who are covered by the basic science laws, that any who practice any branch of healing as outlined by the above definition, who prefix the title of doctor or its abbreviation, or append or suffix a degree containing the word "doctor" should not be exempted from the basic science law or its board's examination; namely, chiropodists and optometrists.

3. The provision for the creation of the board and the appointment of members may be worded as follows:

The Governor, within thirty days after this act takes effect, shall appoint a state board of examiners in the basic sciences (hereinafter referred to as the board), consisting of five members. The members of said board shall be appointed one, for one year; one, for two years; one, for three years; one, for four years; and one, for five years; from the dates of their respective appointments. On the expiration of the term of any member, the Governor shall fill the vacancy by appointment for a term of five years. On the death, resignation, or removal of any member, the Governor shall fill the vacancy by appointment for the unexpired portion of the term. Every member shall serve until his successor is appointed and qualified. The members of the board shall be selected because of their knowledge of the basic sciences aforesaid, and each member shall be a professor, or an associate or an assistant professor on the faculty of an accredited college or university approved by the Northcentral Association of Colleges and Secondary Schools or its equivalent. Each member shall have resided in ( ) not less than one year next preceding his appointment. No member of the board shall be actively engaged in the practice of the healing art or any branch thereof.

4. The provision for examinations may be worded as follows: The board shall conduct examinations at such times and places as it deems best. Every applicant, except as hereinafter provided, shall be examined to determine his knowledge, ability, and skill in the basic sciences. The examinations shall be conducted in writing, but may be supplemented by oral examinations, and if practicable may be supplemented by examinations in the laboratory, or dissecting room.

If the applicant receives a credit of 75 per cent or more in each of the basic sciences, he shall be considered as having passed the examination. If the applicant receives less than 75 per cent in one

subject and receives 75 per cent or more in each of the remaining subjects, he shall be allowed a reexamination at the examination next ensuing on application and the payment of the prescribed fee, and he shall be required to be reexamined only in the subject in which he received a rating less than 75 per cent. If the applicant receives less than 75 per cent in more than one subject, he shall not be reexamined unless he presents proof, satisfactory to the board, of additional study in the basic sciences sufficient to justify reexamination.

5. Provision for requirement of the certificate may be as follows: No certificate shall be issued by the board unless the person applying for it submits evidence, satisfactory to the board, (1) that he is not less than twenty-one years old; (2) that he is a person of good moral character; (3) that before he began the study of the healing art, he was graduated by a high school accredited by the (insert the state accrediting agency) or a school of equivalent grade, or that he possesses educational qualifications equivalent to those required for graduation by such an accredited high school; (4) that he has a comprehensive knowledge of the basic sciences as shown by his passing the examination given by the board, as by this act required. This shall not be construed to prevent the issue of certificates under the provisions of Paragraph 6 of this act.

Note: No evidence is required of the applicant of the extent and nature of his knowledge of the basic sciences. These are to be determined by the board of examiners in the basic sciences by examination. The professional examining board to which the applicant must subsequently apply for his examination for license to practice is to be at liberty to accept the findings of the state board of examiners in the basic sciences with respect to the proficiency of the applicant in those sciences, or to reexamine the applicant in those sciences on its own account at the discretion of the licensing board.

6. The Provision for interstate endorsement or waiver may be worded as follows: The board may at its discretition waive the examination required in Paragraph 4, when proof satisfactory to the board is submitted, showing that the applicant has passed in another state the examinations in the basic sciences before a board of examiners in the basic sciences provided, however, that the statute relative to the certificate and requirements therefore is the same as in this act.

Note: You will notice that in this paper all reference to reciprocity or reciprocal has been eliminated. It has always seemed somewhat anomalous to us to condition the waiver or endorsement of an examination on the action of another state in granting a recriprocal waiver. It is not believed that such a condition has anything at all to do with the actual qualifications of the applicant. The type and content of the examination previously given does have a very important bearing on those qualifications and should be taken into consideration. In fact, the attorney general of various states has ruled that the word "reciprocity" or "reciprocal" implies a contract between states whereby they will endorse a certificate of examination by their respective examining or licensing boards which may be legally interpreted to mean that if they accept one they must accept all applicants which, of course, would be a dangerous and undesirable procedure.

7. Provision for certificate and license cancellation may read as follows: Any basic science certificate and any license to practice the healing art or any branch thereof, issued contrary to this act, is void. Any licensing board which has issued a license on the basis of a void basic science certificate shall revoke or cancel that license. The procedure for such revocation or cancellation shall be in accordance with the provisions of the act under which such license was issued, authorizing the cancellation or revocation of licenses generally. The certificate issued to any person by the state board of examiners in the basic sciences shall be revoked automatically by the revocation of his license to practice the healing art or any branch thereof.

Note: Revocation of license must not be confused with suspension; the latter can or may be reinstated without examination.

8. Provision as to prohibiting the practice of any of the healing arts without a certificate should be as follows: Any person who practices the healing art or any branch thereof without having obtained a valid certificate from the state board of examiners in the basic sciences, except as otherwise authorized by this act, shall be fined not more than ( ) dollars or imprisoned for not more than ( ), or both, in the discretion of the court. The basic science certificate shall at all times be displayed in a conspicuous place in the business office or consultation room of any person who practices the healing art.

9. Provision should be made for prohibiting the

use of fraudently obtained or forged certificate and for prohibiting the issuance of fraudulent licenses, with penalties consistent with the penal statutes in the particular state.

10. The act should contain provision for exempting certain groups as dentists, nurses, and others and the following language is suggested: This act shall not be construed as applying to dentists, nurses, pharmacists, and perhaps chiropodists and optometrists, provided they are not legally permitted to use the title "doctor" or its abbreviations and who are practicing within the limits of their respective callings; nor to persons licensed to practice the healing art or any branch thereof in ( ) when this act takes effect; nor to persons specifically permitted by law to practice without licenses, who practice each within the limits of the privilege thus granted to him.

Note: To meet the conditions in some states, interns and resident physicians in postgraduate training in hospitals approved by an official accrediting agency or board, may be exempted for the period of their training, not to exceed ( ) years.

There will, of course, be other provisions which must be decided upon following co-operative study and formulated by committees appointed to prepare a proposed uniform basic science act. There are many provisions which might result in the repeal of the basic science laws. There are provisions which would defeat the purpose of the basic science legislation.

We should all seek the broadest co-operation to the end that the fundamental purpose of basic science legislation will be achieved. Petty jealousies between basic science boards and the examining and licensing boards regulating the various healing arts should be brushed aside.

The basic sciences are the elementary and fundamental sciences on which all healing is based. They are basic or common to all systems and theories of healing. Therefore, I believe that we must all admit that a basic science law is a public health law to promote better health standards and to safeguard and protect the sick public at large. A minimum standard of education for every practitioner is not to be considered as inimical to a good public health policy.

To summarize may I suggest that the answer raised in the title of this paper should be *revision* providing it includes or contains the "must clause" or essentials of a uniform basis science act which are, to recapitulate and emphasize:

1. Uniformity in name and number of subjects.
2. Uniformity or content of examinations which must include:
   (a) Number of questions
   (b) Time allotted each subject
   (c) Minimum passing grade requirement

The above answers the equivalency requirement found in all basic science laws therefore will insure interstate endorsement or waiver privileges, which next to the examinations, are the most important or vital part of any basic science law. It will protect the sick public by providing and insuring better training in the basic sciences or fundamentals to all who practice the healing arts. Also, the free and rapid interchange of doctors of the peoples choice from one basic science state to another.

Unless this is brought about in the near future, I predict that an indignant public will demand their state legislatures to repeal the basic science laws that were enacted to protect their health and welfare.

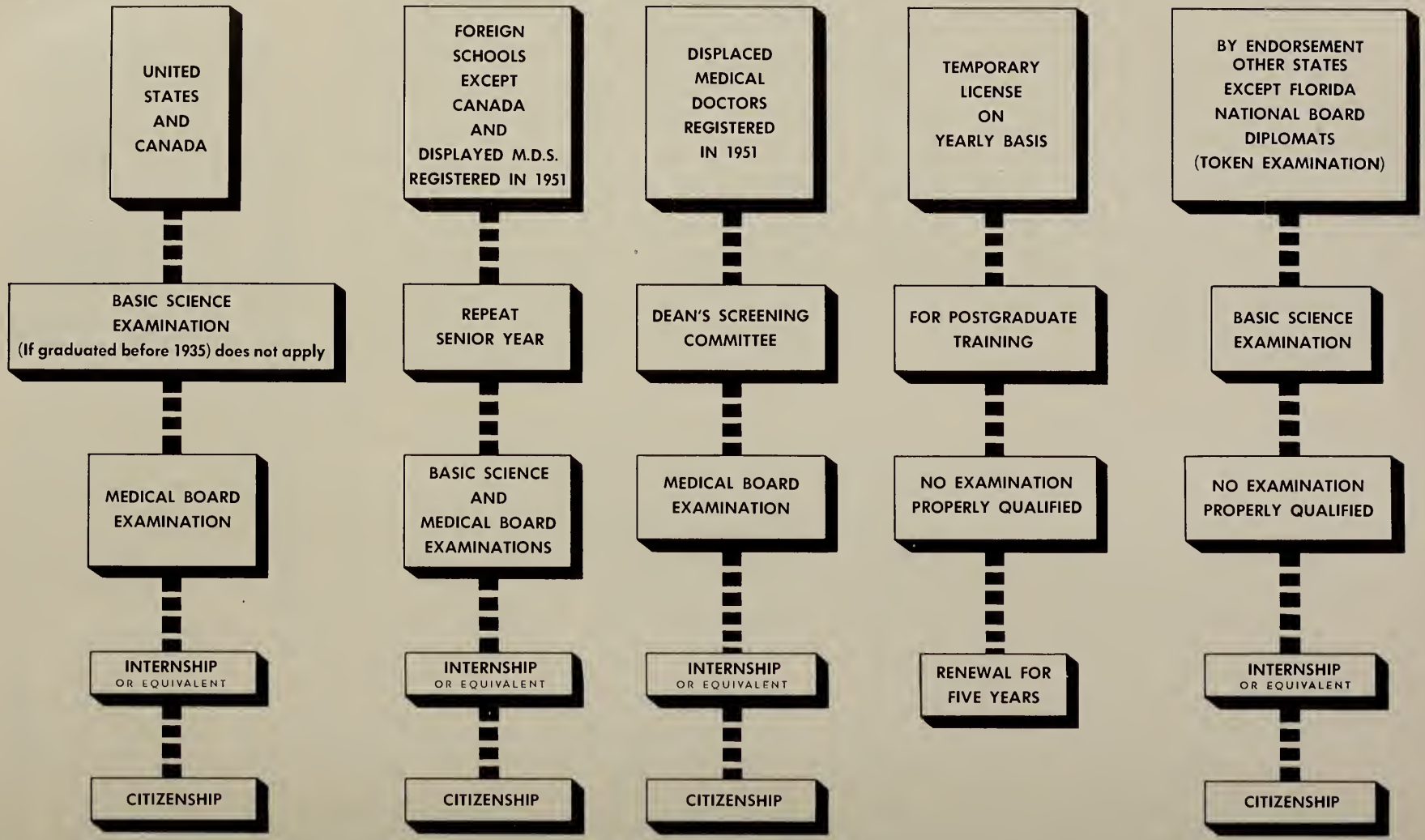
THE PRESENT STATE OF TONOGRAPHY

(Continued from Page 1101)

chronic glaucomas as a group lends new support to the impaired outflow theory of chronic glaucoma. The fact that miotics distinctly improve the facility of outflow in such eyes permits several interpretations. The most likely one is the assumption of more efficient outflow conditions created by changes in the vascular pressures in the anterior uvea and thereby also in the deep scleral plexus.

The present status of tonography may be described as that of a most promising method with which a number of important facts have already been established. At this point, the ground to be explored vastly exceeds what may be considered as known territory.

MEDICAL LICENSURE IN MICHIGAN



E. C. SWANSON, M. D. 1953

Medical Licensure in Michigan

By E. C. Swanson, M.D., Vassar, Michigan

The medical practice act was enacted in Michigan in the year 1899. Ten members were appointed to administer the same including two eclectics, two physiomedics, two homeopaths and four regulars. This group was known as the Michigan State Board of Registration in Medicine. At the present time they are appointed by the Governor of the State from a list of members suggested by the Michigan State Medical Society.

Their duties are as follows:

1. Examination of qualified applicants for licensure at Detroit, Ann Arbor, and Lansing.
2. Review credentials of interns and residents of hospitals and to permit only qualified persons to serve in such capacities.
3. Review and act on all written complaints concerning persons practicing medicine in the state.
4. Report violators of the act to the proper law enforcement agencies.
5. Attend regular business meetings in Lansing during the months of June and October of each year.
6. Attempt to protect the sick and injured public of the state by permitting only qualified persons to practice medicine.

The law was amended in 1951 and 1952 as it applies to graduates of foreign medical schools.

The state Board of Registration in Medicine, through the co-operation of the Deans of both medical schools in our state organized the "Deans Committee' whose duty it was to interview about seventy displaced medical doctors who had been registered in Michigan about that time.

Citizenship or application for the same and a rotating internship or its equivalent are also necessary for all applicants for licensure except those foreign graduates seeking additional post-graduate work in the teaching hospitals. These individuals may be granted yearly temporary licensure up to five years after which time these persons return to their respective countries.

All persons who graduated after 1935 in medicine must also present a certificate from the Basic Science Board of the State before being permitted to apply for examination for medical licensure.

The accompanying chart indicates the procedure necessary to obtain licensure in Michigan. (See opposite page.)

Dr. Swanson is a member Michigan State Board of Registration in Medicine. Paper and chart (1106) presented at MSMS County Secretaries' Conference, Lansing, February 25, 1953.

FRUCTOSE METABOLISM

(Continued from Page 1099)

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Michigan State Medical Society Past Presidents 1886-1893



In Michigan, 1886-1893 was a great era of "growing pains." Still the great lumbering state, the "inexhaustable supply" of her immense forests was faltering. The peak came in 1889 when almost 5½ billion board feet, 80 per cent of it pine, issued from Michigan sawmills. Railroad building was at its climax, and by 1893 most of the state's network was completed. The first gasoline-powered automobile was yet to come, but in 1887 Ransom E. Olds drove a three-wheeled steam contraption around Lansing.

By 1886, one-fifth of Detroit's population was supplied with running water. Incandescent lights and trolley cars were appearing, but common folks still had twenty years of kerosene lamps or gas before them. Grand Rapids had a small telephone exchange for less than 1,000 of the elite.

Grover Cleveland, defeated in 1888 by Benjamin Harrison, was re-elected in 1892, carrying with him to victory Vice-President Adlai E. Stevenson, a name which was to crop up in an election sixty years later!

(MSMS past presidents from 1894 to 1902 will be featured in an early issue)

To Work in Harmony Makes Progress

President's Message



This is the first time that my name appears on the President's Page of THE JOURNAL of the Michigan State Medical Society, and I thank the members of the Michigan State Medical Society for the honor and privilege of representing them as their President. Looking back over the names of those men who have held the office and noting the progress made toward a better Medical Society, better public and intraprofessional relations during their tenures of office, makes me hope there will be no slowing down in that forward progress during the coming year. I pledge my best efforts to keep up that progress to the best of my ability.

This is written before the annual session at Grand Rapids, and the 1953 meetings of the House of Delegates. There are several rather controversial questions coming up for discussion and decision. It has been said by several of my medical friends that these questions "could split the medical profession wide open." This I do not believe. Ours is a representative form of government. A decision having been made by our representatives officially makes it incumbent on all of us to abide by that decision and do our best to work in harmony. That does not mean that differences of opinion regarding certain measures are not healthy or not welcome and that a loyal opposition in government is wrong. No organization or society can long live and progress without diversity of opinion and a willingness to work for change that is believed to be good. However, let us keep our deliberations and discussions on a high plane. Ours is an honorable profession, and its members are honorable men and women of whom we are proud.

L. W. Hull

President, Michigan State Medical Society

Editorial

NEEDED FEDERAL LEGISLATION

THERE are several pieces of Federal legislation in which the medical profession is and should be vitally interested, not only on our own account, but for the benefit of our patients. Some of these items we have been calling to the attention of our membership for many years, while others are of more recent date.

Of first and probably greatest importance is the unfairness and discrimination of the federal income tax laws in regard to providing an income during a person's older or retired low income years. In industry, executive employes are able to look with confidence on the later years. Retirement programs are set up which are charged to expense and thus are deductible for income tax purposes. This amounts to an increase in salary or wages, but is taxable only when it becomes a retirement benefit. This privilege is denied the self-employed. We have suggested for years that members of these callings of medicine, dentistry, law, architecture, engineering, clergy, and others be allowed to invest up to 15 per cent of income but not to exceed a stipulated sum, in retirement government bonds or other indicated securities. This income would be declared, but would be deducted for income tax purposes. Several bills have been introduced in Congress to accomplish this purpose. The present bill is the (Reid) Jenkins-Keogh measure which proposes an old-age pension plan. Recently, the officials of the American Medical Association have indicated interest and have testified in favor.

Another needed relief is an amendment to the Social Security act. As now constituted, a person on old-age assistance forfeits his benefits if he is disposed to work and earns as much as seventy-five dollars a month. The theory behind the program is that this social security is an insurance; that the person who benefits has earned his payments the same as though he had carried insurance in one of the recognized insurance companies. Not a State in the Union would allow an insurance company to withhold benefits because the insured tried to work. There is no justification for the federal government to penalize the old-age beneficiary because he is still able to work or willing to work, or for any other reason. As medical men, we all know that one of the worst things that can happen to a man of ambition is to compel him to be inactive. For too many of our patients, the privilege of working is a life-saving boon. Most medical men do not come under the Social Security laws, but our patients do. This is a benefit we owe them. The Social Security penalty for continuing to do any amount of work should be removed without delay.

Several bills in Congress allow taxpayers to deduct medical and health expenses before income tax. A partial deduction has been allowed for years. If there is a justification for making any deduction, and we thoroughly believe in it, a total allowance should be made. The theory is to encourage the taxpayer to look after his health. This measure will make for more work and more bookkeeping on the part of the doctors, but the value to our patients is worth the extra effort.

A fourth measure is to us a crying need—Senate Joint Resolution No. 1.—The Senator Bricker proposed Amendment to the Constitution. It is now being opposed by the State Department, but we firmly believe the administration sponsored the idea in the Presidential campaign. Our (medical) interest is the very serious threat of encroachment of Socializing medicine through treaties and executive understandings. We have seen one Bureau of the United Nations adopt a socialized medicine program, the ILO. More can follow. In spite of the present opposition of Secretary Dulles we need this amendment. We believe there is sufficient self interest for the medical profession to again take a firm stand—the AMA House of Delegates did that once—they should do it again.

THE PRESIDENT'S HEALTH

THE philosophy of this editorial has been the subject of deep consideration for several years. In fact, we once wrote the editorial and put it aside because of the political implications involved. After the last election, we wrote the editorial published in January, 1953, which we hope our readers will again peruse.

We stressed the health security necessary in the choosing of a President rather than as it relates

to his term in office. No industry would think of appointing an executive without having him examined by one or more physicians chosen by itself. The rule is enforced even for the ordinary employes, as all medical men who have done any industrial practice know.

There is no more important "job" in the whole range of industry than the Presidency of the United States. The preservation of the President's health should be one of our most urgent responsibilities. That duty is recognized through the assignment of a military officer to be the President's personal physician. To that extent the government has discharged its responsibility—it has made available competent medical advice, subject to the President's own particular choice.

Every big employer of labor recognizes a first important requisite to the health and well being of its employes—the determination of good health before employment. The United States is an important employer of "labor." Its payroll is enormous, and involves men of vast responsibility, yet it fails to follow the fundamental rule recognized by all employers great or small, to determine the health of its chief employe before employment.

We are being just plain stupid and inefficient. During the past few years we have seen men elected to high office who had a health condition which should have prohibited that election. When a man is elected to any office, and especially the Presidency, he owes a duty to his fellow citizens to serve his term.

We are now at the beginning of a Presidential term. The next election is as far in the future as it may ever be. To change the rules now would be no criticism of or hardship on any individual. Now is the time for Congress to make provision for the proper and adequate health inspection of every candidate for that high office. President Eisenhower has served his life in the military. Every new assignment in the military service involves an immediate health survey. Many times that report has served to change the assignment.

This matter of the President's health has been brought forward just recently by the untimely death of a man who very easily might have been the President, Senator Robert Taft. No one suspected a year and a half ago, at the time of preparation for the nominating Convention, that Senator Taft was ill. Could a physical examination at that time have found his disease in time to avert the tragedy?

There is one columnist we very seldom read, Drew Pearson, but in his column of August 4, 1953, appears the following, which follows so closely our thinking that we are copying it:

> *"Taft's Illness*—The tragic death of Sen. Taft has revived the question, very much discussed since Roosevelt's death, of physical examinations for candidates for the presidency and vice-presidency.
>
> Following the death of President Roosevelt just five months after his election in 1944, it was charged that those close to him knew his health was failing and that he could not possibly last four years. It was charged that the big-city bosses, knowing this, had maneuvered to put their friend Harry Truman in the vice-presidency.
>
> Sen. Taft was not in the same category. No one dreamed he was ailing. He appeared to be in excellent health when a candidate for the presidency last year. His case is more like that of Wendell Willkie, who died suddenly in the fall of 1944.
>
> It was known by a few people but not by the public that Eisenhower had a heart condition which required him to be careful; and since entering the White House his doctor has ordered him to take long week ends and golf three times a week.
>
> Unfortunately the strain on any man in the White House is so great that in recent years the life expectancy of our Presidents has decreased. That's why the tragic death of Sen. Taft has brought to a head the question of requiring all candidates for the presidency to undergo a thorough physical examination with the general results made known prior to the nomination conventions."

GROUP HEALTH AND ACCIDENT INSURANCE

UNDER INSTRUCTIONS of the House of Delegates of the Michigan State Medical Society, a special committee has been studying for some two years and has now devised a plan for group health and accident insurance for the members of the Michigan State Medical Society. There are many such group plans. Some of our counties have a plan covering limited numbers of the membership. Many of the national special societies have such plans, notably the American College of Surgeons, American Academy of Ophthalmology and Otolaryngology, and Academy of General Practice. All of these plans have their limitations as to eligibility to join and as to years covered.

The Committee reported at the House of Delegates in Grand Rapids, September 21, 1953, and after much discussion, was authorized to accept the proposal. Every member of the Society will receive two letters signed by the President and

(Continued on Page 1133)

Lynn Stinson — Good Citizen

"The things which have made me happy?"

One can picture the petite lady smiling slowly as she begins to write in a secluded cabin on Drummond Island, perhaps thinking aloud. With her quiet air of competence and inward confidence she phrases the words. It's not easy to answer at long distance—especially when one is "vacationing"—the request of a demanding editor and sum up a busy lifetime in a few sentences, even when many years still lie ahead.



"These things have made me happy," she writes, as her thoughts gain speed. "Trying to maintain a pleasant, orderly home for a beloved husband who carries on the hectic, demanding practice of a general practitioner. . . . Trying to do a good job of raising my two daughters; giving them the stability of home and surroundings which I didn't completely have in my youth; taking joy in their accomplishments, and sorrow in their failures. . . . Trying to be a good citizen in a community which has been so kind to me and has done so much for me."

And there you have it, a miniature portrait of Mrs. W. S. Stinson of Bay City, newly installed President of the Woman's Auxiliary to the Michigan State Medical Society. Shunning the classification of "clubwoman," she prefers to be known as Mrs. Average American Housewife.

What if she has given hours of her time to the Crippled Children's Society, served on the Board of Directors for the Family Service and Nursing Service associations in Bay City, and taken part in Red Cross, YWCA, and other community activities? These are but a part of being a "good citizen" and homemaker, and not ends in themselves, in the eyes of Lynn Stinson.

Delving into the early years of this Average American Housewife and Good Citizen, there is little of the commonplace to be found. Even her very entrance into this world on a blizzardy January day not too many years ago was far from average, and it served notice of one outstanding fact which Lynn Stinson has come to know so well—that doctors are busy people. For she made her way alone into a little community 25 miles north of Grand Rapids "because a severely injured farmer needed the services of the sorely taxed M.D. more than my mother did."

Her French mother originally had come to the community to teach the local school, while her father's parents had migrated there from Ireland by way of New York and Ohio.

"Perhaps this ancestry, coupled with the circumstances of my birth, have a bearing upon the dominant characteristics of which I am accused—an independence of mind and spirit," explains Mrs. Stinson.

But let it be noted here that the accusation is her own, for those who have worked with her during the past eight years of Auxiliary experience, first as Bay County president and then through the ranks of state office, are much more likely to interpret these "dominant characteristics" as those of leadership and enthusiasm.

Coming from a family of teachers, there was never any doubt that Lynn Stinson would be a teacher. When her father died nine years after her birth, a schoolteacher brother, then twenty-three, became head of the household and there were frequent moves as he continued his education and progressed to larger schools.

"When I was graduated from Berrien Springs High School, I had attended five different schools and never lived longer than three years in one place," Mrs. Stinson recalls.

Still in her teens, her education completed "on

borrowed money" at Western Michigan College in Kalamazoo, Lynn Stinson became a schoolmarm. Her first year was spent at a township school (Schoolcraft county) deep in the Upper Peninsula, where a once-thriving lumbering community had degenerated into almost a "ghost town." The school building, while new, had a once-in-a-while Delco lighting system, a central pot-bellied stove, and a student body several of whose members were not reared in the most hygienic surroundings.

"It was an experience for which I have always been thankful," she recalls today, "for I learned how to live with and amuse myself, and that there are people for whom much can be done and who are grateful for the doing."

Next the young schoolteacher moved to Gaines, near Flint, meanwhile acquiring the fraternity pin of a senior in the University of Michigan Medical School. Then came Berkley, close to Detroit, where young W. S. Stinson, M.D., had become an intern at Grace Hospital.

"After a year, we decided to save bus fare, pool our resources, and, most important of all, make ourselves extremely happy," Mrs. Stinson reports. "So in August, 1930, Dr. Stinson and I were married. . . . For the first time since I was nine years old I had a real home of my own, beautiful to me, even if it was only a two-room apartment."

Two years later, Lue, the first of two daughters, arrived just in time to move to Bay City. For Dr. Stinson, having completed his residency at Ford Hospital, was ready to establish his own practice, "Depression Days" or not.

Lue, today, a Senior at the University of Michigan, majoring in creative writing, dreams with others of producing the Great American Novel. Mary, two and one-half years younger, entered her mother's Alma Mater this fall with hopes of becoming a kindergarten teacher.

Of her qualifications as President of the State Auxiliary, Mrs. Stinson says: "I have none, other than my belief in the importance of the organization, and a knowledge of the mechanics which I have acquired these past years. . . . I know I would never have accepted the office if my husband had not had a sincere faith in the Auxiliary and said that it was my duty to accept the obligation."

Those who know Lynn Stinson take her modest pledge to "do the best I can during the coming year" as a promise that she will attack the job with her characteristic vigor and responsibility.

And when the year is done, dreams Mrs. Stinson: "Then I want to be let alone, so that I may have the joy—and frustrations—of building a new house."

That sounds reasonable enough, but time will tell whether the rest of the world will leave a Good Citizen like Lynn Stinson to herself when there's such a need for accomplishing things!

MICHIGAN STATE MEDICAL ASSISTANTS SOCIETY

(Continued from Page 1100)

employe but a person trained for her duties the same as an x-ray technician, practical or registered nurse.

The Michigan State Medical Assistants Society will continue in its efforts to render educational services and to promote projects beneficial to the physician and the public. Doctor, won't you, as an individual, support our efforts by encouraging your assistant to seek membership in our society, or by joint efforts help to organize a local group in your town? For further information, please write Mrs. Elizabeth E. Peck, President, 1301 David Whitney Bldg., Detroit 26, Michigan.

THE KIMMELSTIEL-WILSON SYNDROME

(Continued from Page 1094)

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Michigan's Department of Health

Albert E. Heustis, M.D., Commissioner

NEW CO-OPERATIVE PROGRAM LAUNCHED

Beginning October 1, the department will launch a program in co-operation with twenty-eight Michigan hospitals to recover immune serum globulin, poliomyelitis immune globulin, and other blood derivatives from placentas.

The department will establish freezer chests in twenty-eight hospitals and expects to process 60,000 placentas during the first year of operation. In addition to providing and installing the freezer units, the department will furnish storage containers, the pickup and delivery service, and will process and distribute the products.

Immune serum globulin and poliomyelitis immune globulin will be distributed by local health officers according to a statewide plan.

A year ago a resolution was passed by the Michigan Hospital Association recommending that all Michigan hospitals co-operate with the Michigan Department of Health in providing placentas free for the preparation of immune serum globulin and other blood derivatives with the understanding that the department would provide the products without charge.

At that time the department expected to install freezer chests in most hospitals within 110 miles of Lansing where over 1,000 births occurred each year. Other hospitals would be added as arrangements could be made.

Because of the urgent demand for poliomyelitis immune globulin, the department postponed this program in order to increase production of globulin in its fractionation laboratory.

By September 1, of this year, the department had produced all the poliomyelitis immune globulin that could be furnished for the current season, since the time required for processing and testing would mean that anything started after that date would not be ready until December.

Within the next year the Department plans to expand the program now being carried on with twenty-eight hospitals to include twenty more, providing a yearly total of 100,000 placentas.

NEW FOUR-COUNTY HEALTH DEPARTMENT

The Houghton-Keweenaw-Baraga-Ontonagon Health Department is now functioning, with Dr. C. A. E. Lund as director. Dickinson-Iron is now a two-county department.

HEALTH DIRECTORS APPOINTED

Michigan's local health departments have a higher percentage of directorships filled than ever before, and the level of training and experience is rising steadily.

C. E. Reddick, M.D., has been appointed director of Bay City and Bay County Health Departments effective September 1.

L. V. Burkett, M.D., is acting director of the Flint City Health Department in addition to being director of the Genesee County Health Department.

W. R. Storer, M.D., is director of the St. Joseph County Health Department, coming to Michigan from Indiana.

NEW VISION CONSULTANT IN FIELD

Charles Weir is a recently appointed vision consultant in the department, working with Caroline Austin in community programs for planning vision services for children.

DIVISION ADDS DUTIES

In line with the policy of changing the plan of department organization to meet new developments and needs, the division of tuberculosis and venereal disease control has become the division of tuberculosis and adult health. Its former responsibilities are continued, with activities in the field of chronic disease control added. There will be no lessening of emphasis on the program for control of the venereal diseases which are still a major health concern in Michigan. Dr. John Cowan, in addition to continuing as director of the expanded division, will serve as medical consultant to the division of industrial health.

1952 SET RECORDS

The year 1952 established some interesting "firsts."

It was the first year in Michigan history without a death from scarlet fever or from typhoid fever.

Only two deaths were recorded from diphtheria, an all-time low.

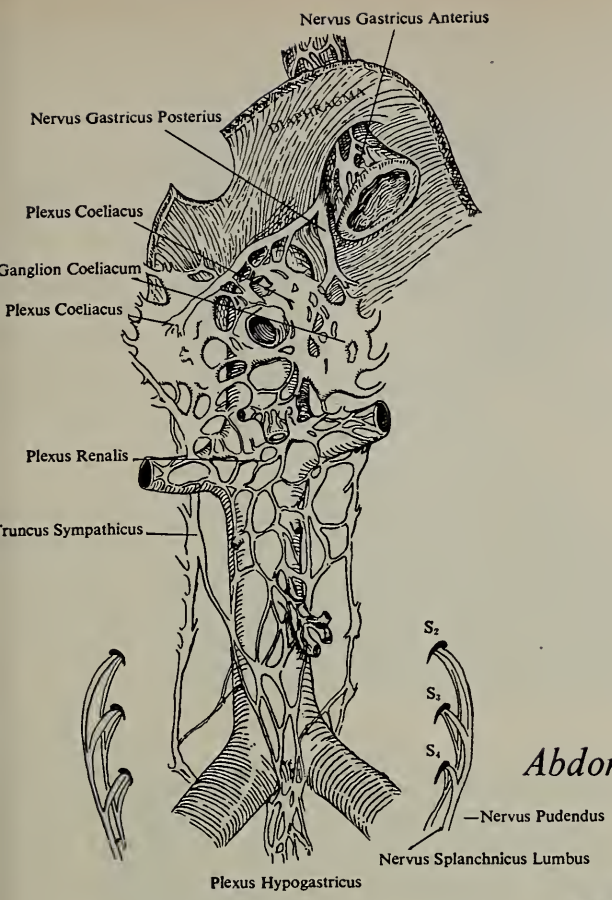
Tuberculosis dropped out of the first ten causes of death for the first time, taking twelfth place.

There were no smallpox cases or deaths, for the sixth consecutive year.

The general death rate was the lowest in our history, 8.8, the first time it has gone below 9.0.

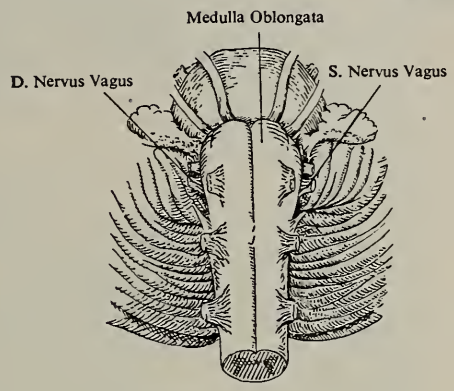
NEW VENEREAL DISEASE PUBLICATION AVAILABLE

The Venereal Disease Division of the Public Health Service has informed us that complimentary copies of a new publication entitled, "Management of Chancroid, Granuloma Inguinale, and Lymphogranuloma Venereum in General Practice" are available on request by private physicians in Michigan. Request should be addressed to J. K. Shafer, Medical Director, Chief, Division of Venereal Disease, Public Health Service, Washington, D. C. The author of this publication is Dr. Robert B. Greenblatt, who is an outstanding authority and an earlier edition of this work has been widely used.



Abdominal autonomic plexus (sympathetic)

Central origin of the vagus nerves (parasympathetic)



Control of Gastric Motility and Spasticity in Peptic Ulcer with Banthīne®

"The need[1] for suppressing gastric motility and spastic states is . . . fundamental in peptic ulcer therapy. Since the cholinergic nerves are motor and secretory to the stomach and motor to the intestines, agents capable of blocking cholinergic nerve stimulation are frequently used to lessen motor activity and hypermotility."

Banthīne[2] "has dual effectiveness; it inhibits acetylcholine liberated at the postganglionic parasympathetic nerve endings and it blocks acetylcholine transmission through autonomic ganglia."

It has been shown[1] to diminish gastric motility and secretion significantly as well as intestinal and colonic motility.

The usual schedule of administration in peptic ulcer is 50 to 100 mg. every six hours, day and night, with subsequent adjustment to the patient's needs and tolerance. After the ulcer is healed, maintenance therapy, approximately half of the therapeutic dosage, should be continued for reasonable assurance of nonrecurrence.

Banthīne® (brand of methantheline bromide) is supplied in: Banthīne ampuls, 50 mg.—Banthīne tablets, 50 mg.

It is accepted by the Council on Pharmacy and Chemistry of the American Medical Association.

1. Zupko, A. G.: Pharmacology and the General Practitioner, GP 7:55 (March) 1953.

2. McHardy, G. G., and Others: Clinical Evaluation of Methantheline (Banthīne) Bromide in Gastroenterology, J.A.M.A. *147*:1620 (Dec. 22) 1951.

SEARLE Research in the Service of Medicine



. . . . . NEWS MEDICAL

Michigan Authors

William M. Tuttle, M.D., of Detroit, read a paper, "Surgical Management of Unresolved Pneumonia," at the State Medical Society of Wisconsin, and also was in a Round Table discussion, "Diagnostic Difficulties in Carcinoma of the Lung," October 6, 1953.

T. Leucutia, M.D., of Detroit, read a paper, "Plesiotherapy and Teletherapy with Various Radioactive Sources," at the State Medical Society of Wisconsin, October 6, 1953.

Hodge N. Crabtree, M.D., and **Daniel C. Hunter, Jr., M.D.,** of Ann Arbor, are the authors of an article, "Carcinoma of the Thyroid," published in the *Archives Of Surgery,* August, 1953.

Reuben L. Kahn, Sc.D., and **Elizabeth B. McDermott,** are the authors of an article, "Specificity Results of Kahn and Cardiolipin Tests in Recent Official Evaluations," published in the *University of Michigan Medical Bulletin,* July, 1953.

Carey P. McCord, M.D., of Ann Arbor, is the author of an article, "Lead and Lead Poisoning in Early America," published in the *Industrial Medicine and Surgery,* September, 1953.

Clifford D. Benson, M.D., and **Frank W. Prust, M.D.,** Detroit, are authors of "Traumatic Injuries of the Liver, Gall Bladder and Biliary Tract in the Infant and Child" which appeared in *Surgical Clinics of North America,* August, 1953.

Meyer O. Cantor, M.D., Detroit, is the author of "Perforation of Esophageal Ulcers Three Years after Total Gastrectomy: A Case Report," which appeared in the *American Journal of Digestive Diseases,* July, 1953.

* * *

No Doctor Draft Calls Expected for 12 Months, Committee Advises.—National Advisory Committee to Selective Service believes there will be no further call for physicians registered under the doctor draft for about a year. The committee, in a report dated September 2, and sent to state Selective Service directors, chairmen of state advisory committees, deans of medical schools and others, states: "It is not expected that there will be additional calls for physicians placed against the Selective Service System by the President for the next twelve months."

It adds: "As a result of Call No. 16 in August (for 542 physicians) and the increased number of volunteers, there have been commissioned a sufficient number of physicians to meet the needs of the armed forces for the immediate future. Those who have been commissioned from either the voluntary list or the Selective Service call will be brought to active duty from time to time until this reservoir is exhausted." The committee says there may be some calls for dentists after several months.—*AMA Washington Letter.*

* * *

Nurses.—One out of every 400 people in the U. S. is working as a nurse, according to the Public Health Service's new "Health Manpower Source Book, Section II: Nursing Personnel." Also in the eighty-eight-page publication, PHS points out that general hospitals now employ four times as many nurses per patient as in 1938.—*AMA Washington Letter.*

* * *

Secretary Hobby Warns Against "Delusion" in Doctor Shortage.—Secretary Oveta Culp Hobby says that "our doctor shortage looks non-existent at first glance, but we should not delude ourselves." The Secretary of Health, Education, and Welfare then makes these comparisons: "Before World War I, we were graduating roughly 6,000 doctors a year. And now we are graduating only about 7,000 a year. In the U. S., while the population has jumped from 105 million to 160 million, the number of doctors graduating each year has climbed only 1,000." Mrs. Hobby's comments were made at the American Hospital Association annual meeting, and copies made available here.

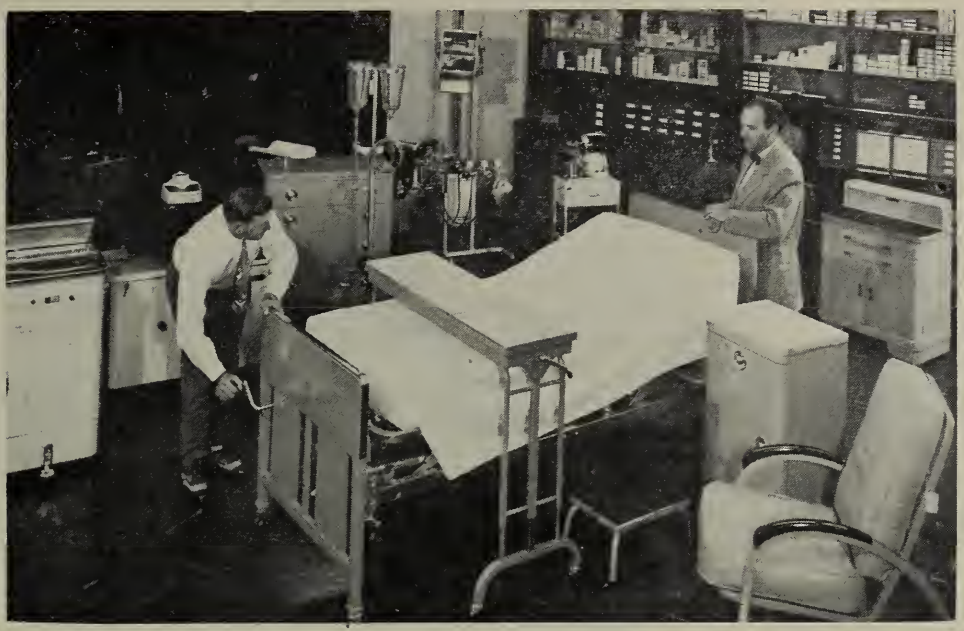
No way has yet been found to save the average American family "from destruction by catastrophic illnesses," Mrs. Hobby states and adds that the answer lies within the private enterprise system. To this end, she would have all organizations in the field of medicine apply "their brains, their experience, and their funds to the solving of this problem." Other points made by the Secretary: (1) the overwhelming majority of the American people have no desire whatsoever for socialized medicine in any form, (2) the uneven distribution of doctors finds a patient in a major city with recourse to six or eight specialists while a person in a small town may have no doctor within fifty or more miles.—*AMA Washington Letter.*

* * *

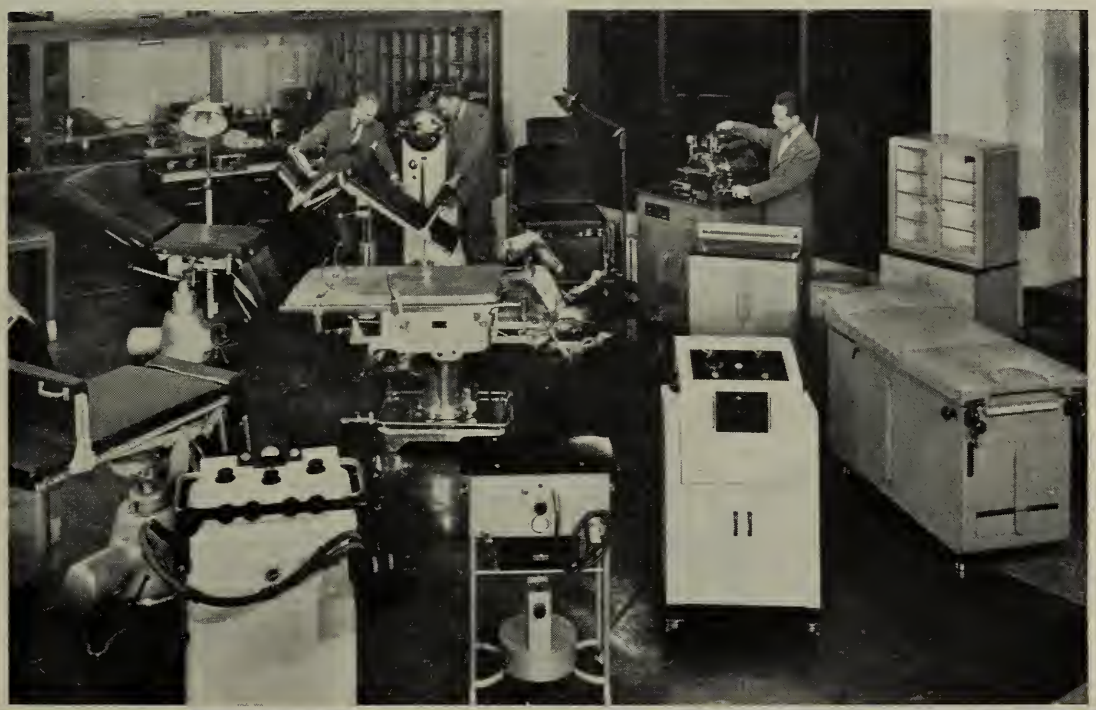
Miners Fund Spent $56 Million on Medicine.—United Mine Workers Welfare and Retirement Fund's annual report for 1952 shows that medical and hospital care accounted for the second largest portion of its expenditures. From a total of $138,963,949.52, medical and hospital expenses amounted to $56,444,329.78. Of the latter, 79 per cent went to working miners and

(Continued on Page 1118)

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(Continued from Page 1116)

their families. The report emphasized state and *local medical society co-operation,* saying that the group's medical program is "organized on the sound principle that responsibility for a medical care program must rest entirely in medical hands." Liaison committees have been established by state medical associations in many of the coal mining states to develop and maintain co-operative relations between practicing physicians and the medical administrators of the Fund. According to the report, "these committees have proved their usefulness and are due to be formalized and strengthened with the probable inclusion of university and state health representation . . . to insure a better total picture of the medical care problems of the state."—*AMA Washington Letter.*

* * *

Dr. Max Karl Newman, M.D., has been re-elected as Secretary-Treasurer of the American Society of Physical Medicine and Rehabilitation at the Annual Meeting, Palmer House, Chicago, August 31, 1953.

At the American Congress of Physical Medicine and Rehabilitation, Palmer House, Chicago, the following papers were given by Michigan Psychiatrists:

James Rae, Jr., M.D., University of Michigan—"Microthermy, Indications and Results," September 1, 1953.

Francis Sweeney, M.D., "Drugs in Multiple Sclerosis," September 1, 1953.

Max Karl Newman, M.D., "Electromyography: Comparison of Myelography and Electromyography following Laminectomy in Root Compression Syndrome," September 3, 1953.

* * *

Harold A. Ott, M.D., has resigned as Medical Director of Florence Crittenton Hospital, which position he filled on a part time basis since its inauguration in 1951. Edward S. Zawadzki, M.D., will assume this position, in addition to his duties as Pathologist and Director of Clinical Laboratories, on October 1. Dr. Ott will devote his entire time to private practice.

* * *

Regular Army Physicians May Now Resign.—Regular officers of the Army Medical Service may resign and leave the service under a new and more liberal Department of the Army policy, according to Major General Silas B. Hays, Acting The Surgeon General of the Army.

Beginning with officers having the longest periods of service, a number will be allowed to resign each month, upon recommendation of The Surgeon General, provided they have met with certain service requirements. Previously, resignations were accepted only in cases of extreme hardship.

According to the new policy, regular officers who have no obligatory commitments to the Army and have served in the Regular Army for a period of three years, are eligible for release. However, if they have served for

(Continued on Page 1120)



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30 days of Nurse at Home	5.00 per day	10.00 per day	15.00 per day	20.00 per day
Laboratory Fees in Hospital	5.00	10.00	15.00	20.00
Operating Room in Hospital	10.00	20.00	30.00	40.00
Anesthetic in Hospital	10.00	20.00	30.00	40.00
X-Ray in Hospital	10.00	20.00	30.00	40.00
Medicines in Hospital	10.00	20.00	30.00	40.00
Ambulance to or from Hospital	10.00	20.00	30.00	40.00
COSTS (Quarterly)				
Adult	2.50	5.00	7.50	10.00
Child to age 19	1.50	3.00	4.50	6.00
Child over age 19	2.50	5.00	7.50	10.00

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(Continued from Page 1118)

less than eight years, they must accept commissions in the Reserve.

"Even though we expect to lose some officers in the next few months," General Hays said, "we believe the new policy will encourage physicians to enter the Regular Army because they will no longer feel that they will be committing themselves to an indefinite term of service. Actually, I believe that an increasing percentage of officers will find the military service so professionally stimulating and so pleasant that they will make it their career," General Hays concluded.

* * *

Promotions and Appointments.—The University of Michigan Medical School has announced a number of promotions in its Faculty:

Walter L. Whitaker, Ph.D., for five years Secretary of the Medical School, has been appointed Assistant Dean. He has been Associate Professor of Anatomy.

A. James French, M.D., promoted to Professor, Department of Pathology;

John F. Holt, M.D., promoted to Professor of Radiology;

Harold R. Blackwell, M.D., promoted to Associate Professor of Physiological Optics in the Department of Ophthalmology;

Fred M. Davenport, M.D., has been promoted to Associate Professor in the Department of Internal Medicine;

Arthur L. Drew, Jr., M.D., promoted to Associate Professor of Neurology;

Ivan F. Duff, M.D., promoted to Associate Professor of Internal Medicine;

Dorin L. Hinerman, M.D., promoted to Associate Professor of Pathology;

Muriel C. Meyers, M.D., promoted to Associate Professor of Internal Medicine;

Lila Miller, Ph.D., promoted to Associate Professor of Biological Chemistry;

James W. Rae, Jr., M.D., promoted to Associate Professor of Physical Medicine;

Herbert E. Sloan, Jr., M.D., promoted to Associate Professor of Surgery;

Martha R. Westerberg, M.D., promoted to Associate Professor of Neurology;

Lauren H. Woods, M.D., promoted to Assistant Professor of Pharmacology;

Reed O. Dingman, D.D.S., promoted to Assistant Professor of Surgery;

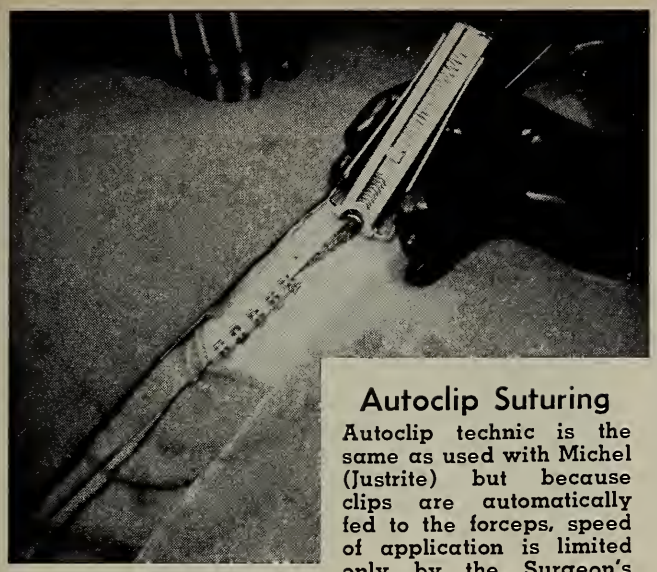
Leonard H. Elwell, M.D., promoted to Assistant Professor of Physiology;

Melvin M. Figley, M.D., promoted to Assistant Professor of Radiology;

Everett R. Harrell, Jr., M.D., promoted to Assistant Professor of Dermatology and Syphilology, and

Willard J. Hendrickson, M.D., promoted to Assistant Professor of Psychiatry.

(Continued on Page 1122)



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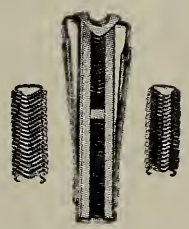
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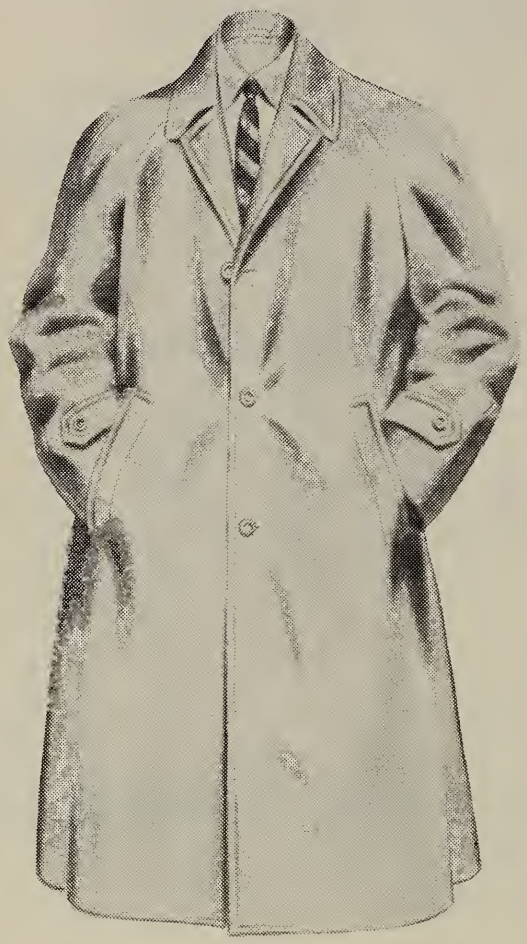
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DETROIT

(Continued from Page 1120)

Mis-use of Blue Cross and other plans is short-sighted, to say the least. We are not as secure in our positions as it looks on the surface. Remember our best weapon in the continual contest is proper treatment of both patient and insurance contract.—From *The Bulletin of the Wayne County and Michigan Academies of General Practice,* August, 1953.

* * *

Remus Robinson, M.D., Detroit, played competitive golf on a blustery day and came in with the best low gross among 235 medical golfers—a sterling 78.

The affair was the twenty-third annual tournament of the Wayne County Medical Society held at Lakepointe Country Club on August 5, 1953.

The first WCMS Golf Committee members (1930) were honored at the 1953 Golfers' Dinner. Golf life membership cards were presented by Chairman H. W. Rice, M.D., to J. Milton Robb, M.D., Harry F. Dibble, M.D., L. O. Lepley, M.D. Wm. J. Burns who was WCMS Executive Secretary at the time of the first tournament, and who acted as toastmaster for the 1953 dinner, also was made a golf life member.

Some thirty-seven members who played in the first tournament of 1930 were present for eighteen holes and dinner at the 1953 show.

One hundred prizes were distributed by Chairman Rice and Bruce Foster, M.D., Chairman of the Prize Committee.

A total of fifty-five residents and interns played in the WCMS tournament this year.

* * *

The Medical Society of the State of Wisconsin has unanimously approved proposals for a building project to house the Society's general offices and related activities. The new building will be constructed on Society-owned property on the south shore of Lake Monona in Madison. Total cost of the new structure is estimated at $415,000.

* * *

Britain's socialized health service has piled up a whopping annual deficit, above the fees collected, of $1,366,000,000. This does not seem to worry the beneficiaries! The British people are not disposed to quarrel about something that is free, or nearly so, and the public in general likes its health service, even though it has impaired medical standards.

The Chicago Daily News of July 2 states: "Nothing in Britain's experience changes our opinion that our own politicians would do better to make good on their promises to make everybody prosperous. Then we can all pay our own doctors' bills."

* * *

Illinois State Medical Society likes MSMS "Convention Reminder": "Before the 1954 Illinois meeting, I want some of the men to see your 1953 Convention Reminder, and perhaps we can develop something along a similar line rather than use the "screamer" as we have for too many years in the past. I hope you are of

(Continued on Page 1124)

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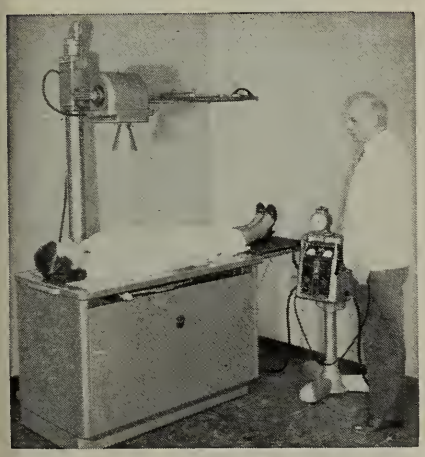
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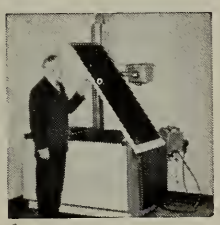
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"Spacesaver" 75 is a combination Radiographic-Fluoroscopic Unit and Examining Table with a capacity ranging from 75 MA at 75 KVP to 5 MA at 96 KVP.

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(Continued from Page 1122)

the opinion that to copy someone else's products is one of the best compliments that can be paid."

* * *

John R. Rodger, M.D., of Bellaire, has been appointed chairman of the seventh annual Michigan Rural Health Conference to be held January 14-15, 1954. The place has not been selected as yet. It will be in a city other than Lansing, to conform with the pattern of holding the Rural Health Conference on the campus of Michigan State College every second year; the 1953 Conference was held on the East Lansing campus. The forthcoming Michigan Rural Health Conference again will be under the financial sponsorship of the Michigan Foundation for Medical and Health Education, Inc., and will be activated by the Michigan Health Council.

* * *

The American College of Chest Physicians offers three annual awards for the best original contribution, prepared by any medical student studying for the degree of doctor of medicine, on any phase relating to the diagnosis and treatment of chest disease. The winning contributions will be announced at the twentieth convention of the American College of Chest Physicians in San Francisco on June 17-20, 1954. For information, write the College at 112 E. Chestnut St., Chicago 11, Illinois.

* * *

"**Government, industry and philanthropists** are spending more than $181,000,000 for medical research in 1953—ten times the amount spent for that purpose in 1941. This is a healthy increase—but we still spend over $185,000,000 per year for monuments and tombstones," stated Harry J. Loynd, President of Parke, Davis & Company, Detroit, in a recent address before the American Pharmaceutical Association.

* * *

The American Medical Education Foundation's second annual report was released on July 7. This indicates the medical profession's determined effort to meet its share of the growing demand from the nation's medical schools for additional financial assistance.

The report lists not only the contributors to the Foundation but the names of individual M.D.'s who made a financial contribution to their own medical schools. For copies, write Hiram W. Jones, Executive Secretary, 535 N. Dearborn, Chicago 10, Illinois.

* * *

Certificates of Fellowship and Associate Fellowship for attendance at the MSMS-U of M postgraduate courses to July 1, 1952, were awarded to Michigan doctors of medicine as follows:

Fellowship certificates.—O. O. Beck, M.D., Birmingham; R. M. Bradley, M.D., Flint; R. S. Breakey, M.D., Lansing; Henry G. Chall, M.D., Detroit; Henry Cook, M.D., Flint; C. W. Colwell, M.D., Flint; J. H. Curts, M.D., Saginaw; R. V. Daugharty, M.D., Cadillac; Nan H. Denholm, M.D., Flint; Frank Diskin, M.D., Muskegon; Theodore Finkelstein, M.D., Flint; Harold F. Grover, M.D., Flint; R. P. Gunn, M.D., Bay City; Hilda A. Habenicht, M.D., Jackson; Harold Kessler, M.D.,

(Continued on Page 1126)



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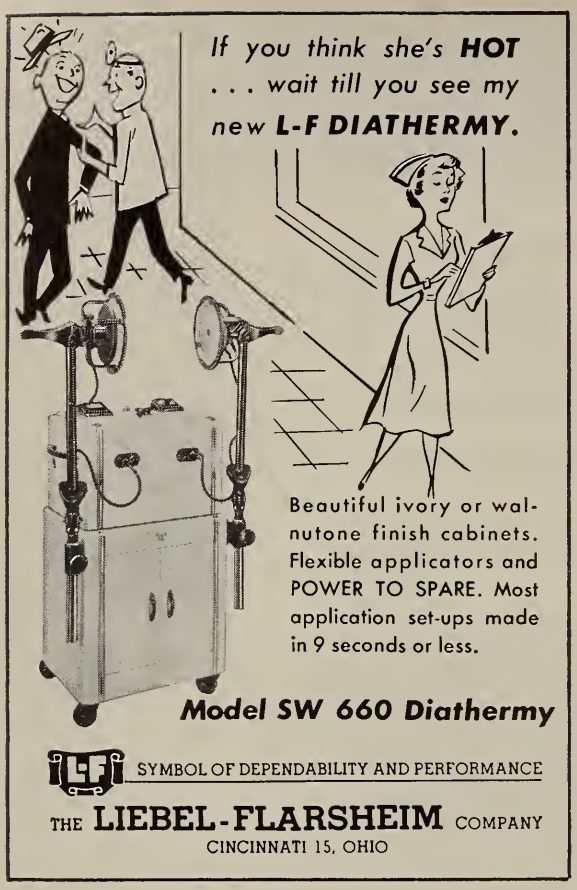
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(Continued from Page 1124)

Alpena; Don M. LeDuc, M.D., Lansing; L. L. Loder, M.D., Muskegon; O. R. MacKenzie, M.D., Walled Lake; F. T. May, M.D., Detroit; A. H. Miller, M.D., Gladstone; L. T. Moleski, M.D., Grand Rapids; J. J. Reichmann, M.D., Mt. Clemens; R. F. Salot, M.D., Mt. Clemens; J. F. Sander, M.D., Okemos; L. E. Sargent, M.D., Jackson; C. J. Scavarda, M.D., Flint; G. A. Sherman, M.D., Lansing; I. E. Silverman, M.D., Lansing; A. M. Sirhal, M.D., Brooklyn; G. W. Slagle, M.D., Battle Creek; S. S. Sorkin, M.D., Flint; H. V. Sparks, M.D., Flint; J. W. Townsend, M.D., Jackson; Frank Van Schoick, M.D., Jackson, and J. T. P. Wickliffe, M.D., Calumet.

Associate Fellowship Certificates.—E. W. Adams, M.D., Jackson; J. H. Ahronheim, M.D., Jackson; R. J. Albi, M.D., Boyne City; Max E. Auble, M.D., Detroit; J. E. Bailey, Jr., M.D., Coldwater; R. H. Baker, M.D., Pontiac; M. C. Bennett, M.D., Marquette; S. A. Bennett, M.D., Detroit; M. S. Bergman, M.D., Detroit; E. A. Bicknell, M.D., Detroit; D. R. Boyd, M.D., Muskegon; W. J. Briggs, M.D., Detroit; William Bromme, M.D., Detroit; S. J. Buist, M.D., Grand Rapids; J. E. Bulthuis, M.D., Jamestown; G. M. Byington, M.D., Detroit; A. D. Calomeni, M.D., Lansing; Joseph Carp, M.D., Detroit; H. H. Cohen, M.D., Detroit; D. L. Davidson, M.D., Bessemer; C. J. DeBoer, M.D., Grand Rapids; E. H. Engel, M.D., Wyandotte; E. H Fenton, M.D., Detroit; R. F. Fenton, M.D., Detroit; R. E. Finton, M.D., Jackson; R. O. Flett, M.D., Millington; J. R. Forsythe, M.D., Detroit; W. L. Foster, M.D., Detroit; R. J. Fraser, M.D., Coldwater; L. W. Frost, M.D., Ypsilanti; B. M. P. Godfroy, M.D., Traverse City; H. L. Gordon, M.D., Midland; A. C. Gorrilla, M.D., Ironwood; E. P. Griffin, Jr., M.D., Flint; C. R. Haberlein, M.D., Traverse City; T. L. Hackett, M.D., Jackson; L. J. Hallen, M.D., Detroit; J. L. Hammond, M.D., Taylor Center; J. R. Heidenreich, M.D., Daggett; H. H. Heuser, M.D., Bay City; W. F. Jackson, M.D., Rogers City; S. S. Jacob, M.D., East Lansing; J. H. Jewell, M.D., Roseville; A. E. Judd, M.D., Flint; C. S. Kay, M.D., Muskegon; J. I. Laird, M.D., Goodrich; E. C. Long, M.D., Detroit; Arthur McArthur, M.D., Flint; N. D. McGlaughlin, M.D., Wyandotte; R. M. McKean, M.D., Detroit; J. H. Maxwell, M.D, Detroit; C. P. Mehas, M.D., Pontiac; H. J. Meier, M.D., Coldwater; W. E. Mercer, M.D., East Lansing; H. A. Miller, M.D., Saline; B. T. Montgomery, M.D., Sault Ste. Marie; H. F. Osterhagen, M.D., Traverse City; E. E. Parker, M.D., Leslie; D. J. Pearson, M.D., Battle Creek; G. C. Penberthy, M.D., Detroit; S. C. Petix, M.D., Detroit; E. H. Place, M.D., Lansing; L. A. Poznak, M.D., Midland; A. B. Procailo, M.D., Garden City; F. L. Purcell, Jr., M.D., Goodrich; R. M. Ragan, M.D., Flint; J. A. Ramsey, M.D., Alpena; E. E. Reynolds, M.D., Williamston; J. B. Howe, M.D., Flint; F. C. Ryan, M.D., Kalamazoo; H. D. Scarney, M.D., Detroit; H. K. Schillinger, M.D., Dearborn; I. Carl Schlecte, M.D., Rochester; R. I. Shapiro, M.D., Detroit; M. S. Sharp, M.D., Lan-

(Continued on Page 1128)

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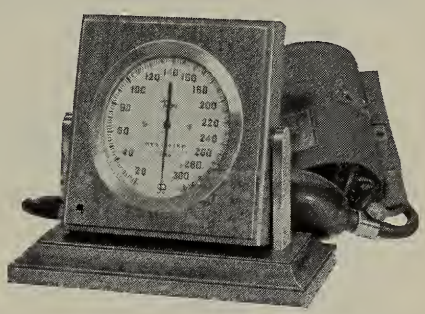
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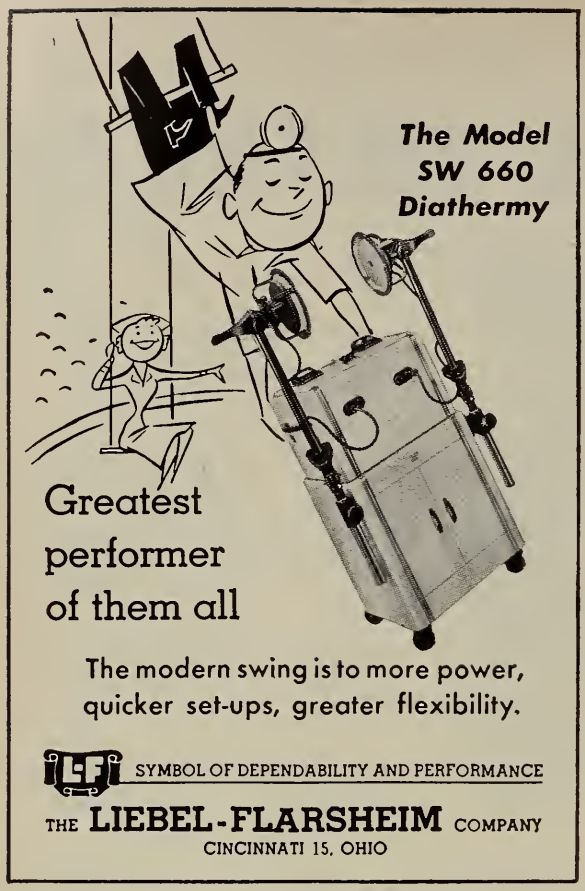
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Surgical Anatomy and Clinical Surgery, two weeks, starting November 9
Gallbladder Surgery, ten hours, starting October 26
General Surgery, two weeks, starting October 12
Surgery of Colon and Rectum, one week, starting October 26
Thoracic Surgery, one week, starting October 12
Esophageal Surgery, one week, starting October 19
Breast and Thyroid Surgery, one week, starting October 26
Fractures and Traumatic Surgery, two weeks, starting October 26

GYNECOLOGY—Intensive Course, two weeks, starting October 19
Vaginal Approach to pelvic Surgery, one week, starting November 2

OBSTETRICS—Intensive Course, two weeks, starting November 2

MEDICINE—Electrocardiography and Heart Disease, two weeks, starting October 12
Gastroenterology, two weeks, starting October 26
Gastroscopy, two weeks, starting November 2

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* * *

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* * *

The Town Crier (Mark Beltaire in *Detroit Free Press*) asked on August 1, 1953: "Why keep pussyfooting on cancer? How long are authorities going to pussyfoot when it comes to letting us know what is really wrong with such great Americans as Senator Robert Taft? Chap in Arizona seems to be the first to mention the dread name of cancer. Why should it be kept under cover as if it were something disgraceful? I thought the old bugaboo was ended when Damon Runyon died . . . and the American Cancer Society made great capital out of the various mushy-mouthed ways his death was reported. The same with Senator Arthur Vandenberg. When are we going to learn that cancer can't be licked by denying its existence?"

A request for permission to quote this pertinent message in JMSMS elicited the following paragraph in Beltaire's column of August 17:

"MEMO TO BILL BURNS, executive director of the Michigan State Medical Society: You certainly have full permission to quote at any length from The Town Crier of August 1 on the subject headed "Why Keep Pussyfooting on Cancer?" The piece referred to the secrecy concerning the late, great Senator Robert Taft's final illness. It was told later that Senator Taft preferred to keep the knowledge of his own tragedy from his ailing wife. That's understandable, of course. But as a guy who watched the jolting ravages of this horror in his own family, I sincerely detest the state of mind that denies its existence."

* * *

The American College of Physicians announces its postgraduate courses for the autumn of 1953: (a) In "Clinical Neurology," at Jefferson Medical College, Philadelphia, November 2-6, 1953; (b) in "Present-day Therapy and Its Physiological Basis," at University of Utah College of Medicine, Salt Lake City, November 9-13, 1953; (c) seminars in "Internal Medicine," Van-

(Continued on Page 1130)



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(Continued from Page 1128)

derbilt University School of Medicine, Nashville, Tenn., November 16-20, 1953, and (d) "The Newer Biological and Physiological Approaches to Clinical Problems" at University of Wisconsin Medical School, Madison, November 16-20, 1953.

* * *

Wayne County Medical Society's excellent scientific program for the 1953-54 season is as follows:

1953

October 5—Cornelius P. Rhodes, M.D., New York
"Advances in Cancer Diagnosis and Treatment."

November 9—Jerome W. Conn, M.D., Ann Arbor
"Diabetes in Obesity"

December 7—Otto Steinbrocker, M.D., New York
"Treatment of Arthritis"

1954

January 11—Grover C. Penberthy, M.D., William Tuttle, M.D., C. J. Frantz, M.D., C. Leslie Mitchell, M.D., John Webster, M.D.
Panel Discussion on "Trauma"

February 1—Julius Comroe, M.D., Philadelphia (Beaumont Lecture)
"Physiology of Respiration"

March 1—Arthur M. Master, M.D., New York
"The Care of the Patient with Acute Coronary Occlusion"

April 5—Robert B. Greenblatt, M.D., Augusta, Ga.
"Problems in Infertility"



Sixty years ago, tuberculosis was declared a reportable disease by the Michigan State Board of Health. Sixteen years later, reporting tuberculosis cases became a legal responsibility of physicians in this state.

Last year, ninety-four Michigan tuberculosis deaths—12 per cent of the total—were first reported as cases on death certificates. Does this reflect failure to diagnose the cases, or failure to report them? And what are the implications as to future cases resulting from these unisolated far-advanced cases?

—**Michigan Tuberculosis Association**

The American Goiter Association offers the Van Meter Prize Award of $300 for the best essays submitted concerning original work on problems related to the thyroid gland. The awards will be made at the annual meeting of the Association in Boston, April 29-May 1, 1954. For further information, write John C. McClintock, M.D., Corresponding Secretary, 149 Washington Avenue, Albany 10, New York, no later than January 15, 1954.

* * *

To further broaden the uses of radiology and for the good of mankind, the James Picker Foundation for Radiological Research announces grants, fellowships and

cholarships, for which applications may be submitted ıp to November 30, for next year. For application ɔlank, write to the Foundation at 70 Broadway, New ork 4, N. Y.

* * *

Medico-legal Institute, Detroit, December 10-11: This Institute, under the sponsorship of the State Bar of Michigan, will be held at the Sheraton-Cadillac Hotel with Herbert Winston-Smith, M.D., LL.B., University of Texas, as its Director.

Doctors of medicine, lawyers, professors and teachers of legal medicine and of law will be interested in hearing their confrere, Dr. Smith, at this two-day meeting which will be the first "integral short course" of an over-all three "interval course," each to follow at an approximate six-month period.

All MSMS members are cordially invited to attend this course. Advance registrations may be made by sending $25.00 payable to the Michigan Law Institute, c/o State Bar of Michigan, 412 Olds Tower Bldg., Lansing, Mich.

* * *

The Fifth Michigan Cancer Conference, sponsored by the Cancer Control Committee of the Michigan State Medical Society, was held in the Kellogg Center, East Lansing, on Wednesday, October 21, in connection with the Annual Leadership Conference of the two Michigan Divisions of the American Cancer Society. A third co-sponsor was the Michigan Department of Health.

H. M. Nelson, M.D., Detroit, President of the American Cancer Society, presided at the morning session.

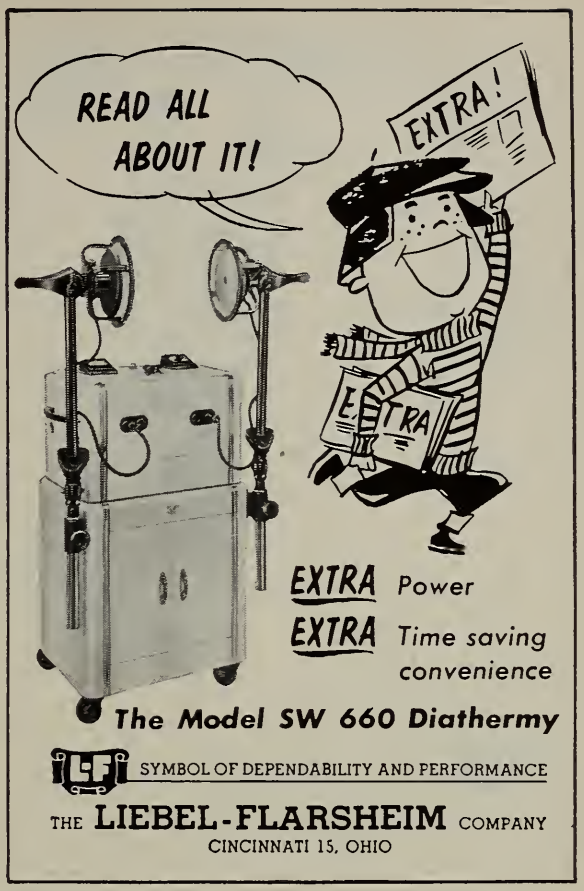
The Conference theme was "Behind the Scenes in Cancer Control." For the first time in Michigan, speakers drawn from the medical specialties concerned each discussed the part he plays in the diagnosis and treatment of cancer. J. S. DeTar, M.D., Milan, a general practitioner; S. G. Meyers, M.D., Detroit, an internist; R. L. Mustard, M.D., Battle Creek, a surgeon, and J. C. Cook, M.D., Detroit, a radiologist, took the audience into their consultation rooms and, in simple language, explained the contribution each specialty makes to the diagnosis and treatment of the cancer patient.

J. R. Heller, M.D., Director of the National Cancer Institute, U. S. Public Health Service, Bethesda, Md., reported on recent research problems in the cancer field. A five-year report on the highly successful and widely copied Hillsdale Plan for Tumor Detection was given by A. W. Strom, M.D., Hillsdale.

C. H. Keene, M.D., Chairman of the Cancer Control Committee, presided at the luncheon meeting.

Commissioner of Health A. E. Heustis, M.D., introduced Mr. Laurence J. Taylor of Hillsdale College who moderated a panel discussion on the morning papers and questions proposed by the audience.

The number of physicians exceeded by far the number attending any previous Conference. The total attendance also was much larger and indicated a growing interest in this form of combined professional and lay cancer education program.



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Acknowledgment of all books received will be made in this column, and this will be deemed by us as full compensation to those sending them. A selection will be made for review, as expedient.

ENDOCRINE TREATMENT IN GENERAL PRACTICE. Edited by Max A. Goldzieher, M.D., and Joseph W. Goldzieher, M.D. New York: Springer Publishing Co., Inc., 1953. Price $8.00.

This book combines the efforts of twenty-one contributors in an admirable fashion. The classical presentations of diseases of the individual endocrine glands was considered out of place in view of the problems of a busy daily practice. The authors act as consultants and approach the problem as it is seen in practice, considering the history and symptoms, signs, diagnosis, and the best therapeutic regime. Controversial opinions are avoided.

The material has been arranged and presented according to presenting symptoms and types of metabolic disturbances also. There are five major divisions: 1. Disorders related to Age: 2. Disorders of Metabolism and Nutrition: 3. Disorders of Organ Systems: 4. Disorders of Resistance and the Neoplastic Diseases; and 5. Hormone preparations Available. In these chapters the authors encompass all forms of therapy of the endocrinopathies as well as the use of hormones in conditions and diseases whether there is an endocrine deficiency or not. An example would be the use of androgens in order to promote protein synthesis and formation of new tissue.

This text has been well written; its arrangement makes ready reference. The printing and illustrations are good; and the coverage of the field is very complete. It can readily be recommended as an addition to the busy practitioner's library.

G.W.S.

DISEASES OF METABOLISM; Detailed Methods of Diagnosis and Treatment. Edited by Garfield G. Duncan, M.D., Director of Medical Division, Pennsylvania Hospital, and Clinical Professor of Medicine, Jefferson Medical College, Philadelphia, Pennsylvania. With Contributions by: Walter Bauer, Hugh R. Butt, Abraham Cantarow, Garfield G. Duncan, Frank A. Evans, Ferdinand Fetter, Joseph M. Hayman, Jr., Ancel Keys, Friedrich Klemperer, Rachmiel Levine, Edward H. Mason, Max Miller, John P. Peters, J. E. Rall, Rulon W. Rawson, Samuel Soskin, Tom D. Spies, Cecil Watson, Abraham White, and Priscilla White. Third Edition. Illustrated. Philadelphia: W. B. Saunders Co., 1952.

The recent advances in this field plus the widespread support the previous editions received made it imperative that a new and revised text be published. It is most welcome and will make many new friends for the authors. Seven new authors have been added while eight contributions to the second edition do not appear. A new chapter, "Porphyrin Metabolism" has been added as has an alphabetical author index.

Many chapters have been completely rewritten; such

as those dealing with carbohydrate metabolism, gout, water balance in health and disease, diseases of the thyroid and diabetes mellitus. This latter chapter is most comprehensive and follows the "exchange system" of diet prescription advocated by the American Diabetes Association.

Overlapping of subject material is inescapable and the editor has wisely refrained from eliminating duplication of subject material by different authors; this being especially true in chapters on Diseases of the Kidneys, Water Balance, and Mineral Metabolism. As we all know, the separation of metabolism from endocrinology is most difficult at times. The format is good and errors and omissions are almost entirely absent. The author and his contributors are to be commended for such an excellent work.

G.W.S.

GROUP HEALTH AND ACCIDENT INSURANCE

(Continued from Page 1111)

Chairman of The Council outlining the proposed plan of insurance. Acceptance is a personal prerogative, but it is hoped that every member who can, will avail himself of this advantageous insurance *in addition to what he now carries.* No doctor ever carries too much insurance of this nature.

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In Memoriam

ELMER L. HENDERSON, M.D.

With the death of Elmer L. Henderson, M.D., of Louisville, Kentucky, American medicine lost one of its most distinguished members and a vigorous fighter who championed many causes on behalf of the profession which he loved. The sixty-eight-year-old surgeon, who held nearly every high medical office that a doctor of medicine could achieve, died at his home July 30, following a lingering illness.

Dr. Henderson served as President of the world's two largest medical organizations, the AMA and the World Medical Association, and as Chairman of the AMA Board of Trustees and its Executive Committee. He served the armed forces in three wars, held every important medical office in his home state, and headed various regional associations.

He was called upon for his biggest and toughest job in 1948, when he was named Chairman of the Campaign Co-ordinating Committee in AMA's national education campaign against the socialization of medicine in the United States. From December, 1948, to September, 1952, he tackled this job with a stamina that knew no bounds, and his leadership in the vigorous and effective campaign won worldwide acclaim from the opponents of political medicine.

His leadership, his counsel, his understanding of human nature, and his enthusiasm in the fight for what he believed was right for his patients and for the nation will be greatly missed. American medicine has known few men like Dr. Elmer Henderson.

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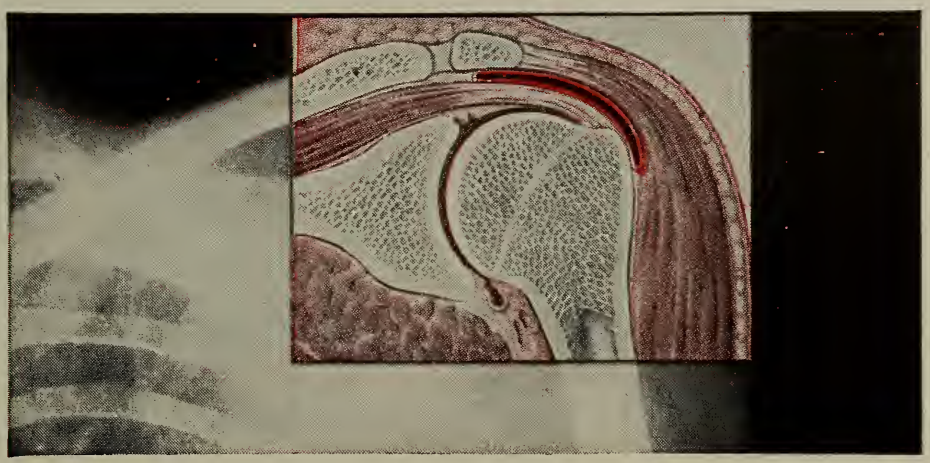
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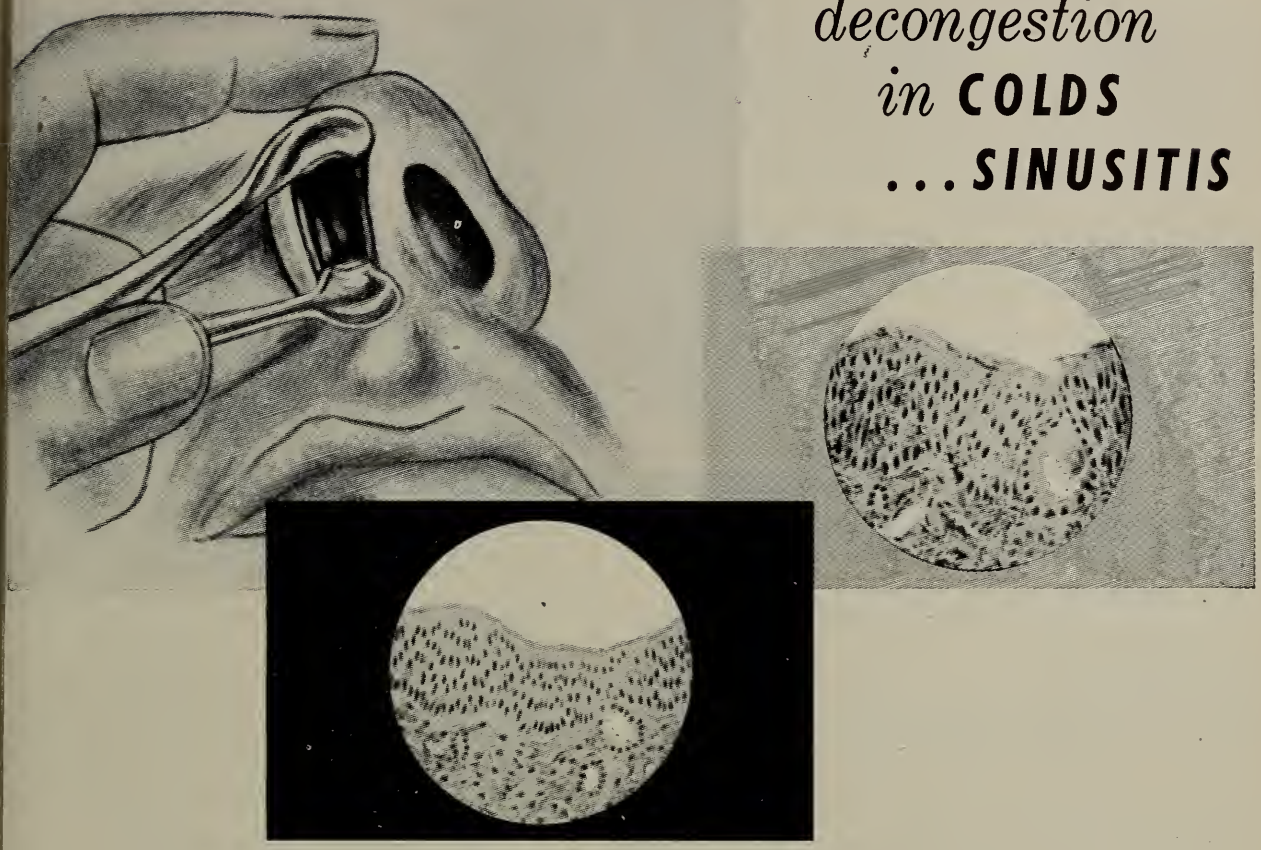
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(Continued on Page 1146)

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(Continued from Page 1144)

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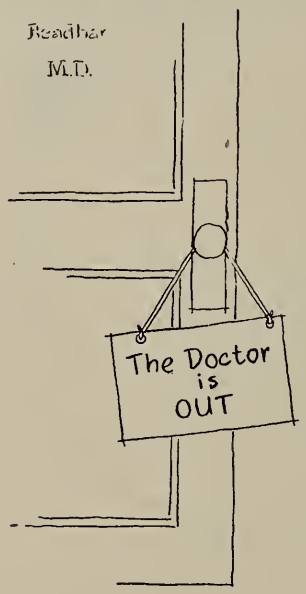
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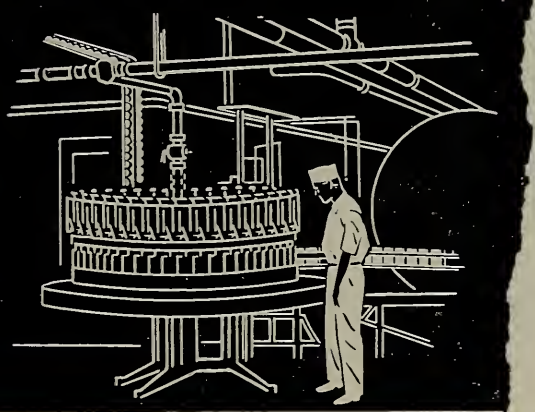
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HIGHLIGHTS OF SEPTEMBER SESSION OF THE COUNCIL

September 20 and 25, 1953

Three meetings of The Council were held during the 88th Annual Session of The Michigan State Medical Society in Grand Rapids. A total of ninety-five items was presented and discussed by the twenty-five members (eighteen Councilors, the Speaker and the Vice-speaker of the House of Delegates, the President, President-elect, Immediate Past president, Secretary, and Treasurer. Three-hundred-thirty-three (333) cumulative hours were contributed by these members of The Council to weigh and to decide upon the problems facing the entire medical profession of Michigan, including:



The Council, Michigan State Medical Society, 1953-54

Front row *(left to right):* D. Bruce Wiley, M.D., Utica; R. H. Baker, M.D., Pontiac; H. B. Zemmer, M.D., Lapeer; Chairman William Bromme, M.D., Detroit; L. W. Hull, M.D., Detroit; W. S. Jones, M.D., Menominee; and L. Fernald Foster, M.D., Bay City.

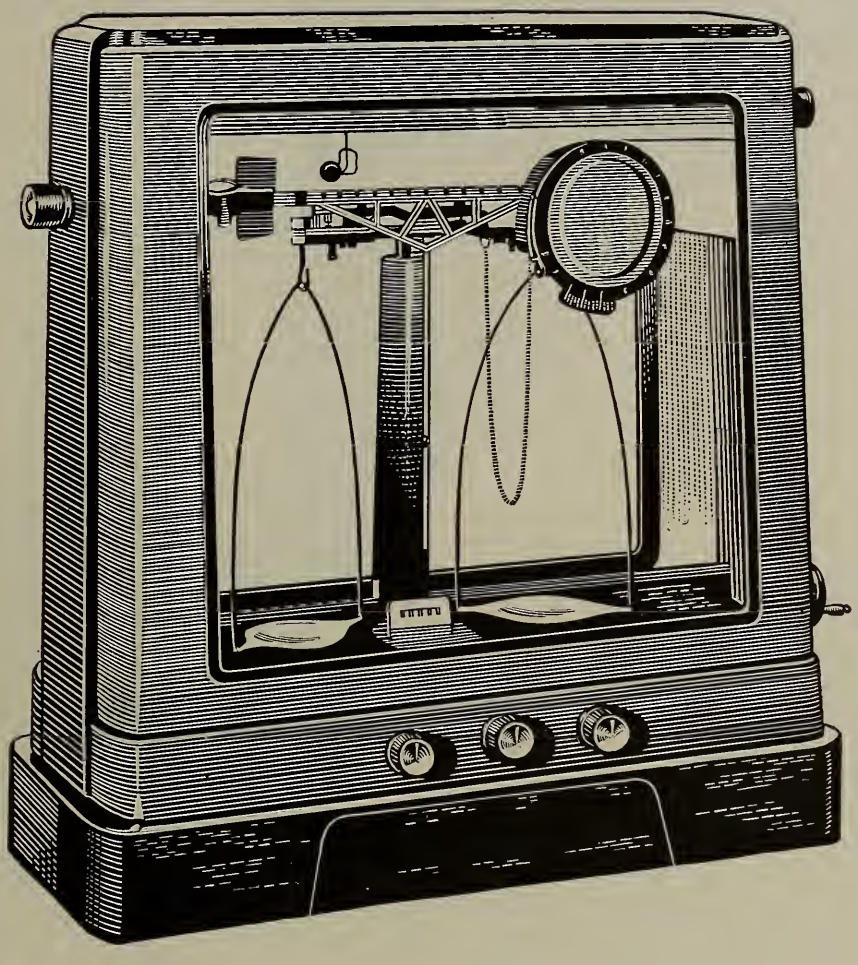
Standing *(left to right)*: R. J. Hubbell, M.D., Kalamazoo; Editor Wilfrid Haughey, M.D., Battle Creek; F. H. Drummond, M.D., Kawkawlin; G. B. Saltonstall, M.D., Charlevoix; B. M. Harris, M.D., Ypsilanti; W. M. LeFevre, M.D., Muskegon; H. H. Hiscock, M.D., Flint; W. A. Hyland, M.D., Grand Rapids; J. E. Livesay, M.D., Flint; R. S. Breakey, M.D., Lansing; Ralph W. Shook, M.D., Kalamazoo; B. T. Montgomery, M.D., Sault Ste. Marie; L. C. Harvie, M.D., Saginaw; and J. D. Miller, M.D., Grand Rapids.

Absent on MSMS Business: Arch Walls, M.D., Detroit; G. W. Slagle, M.D., Battle Creek; W. D. Barrett, M.D., Detroit; W. B. Harm, M.D., Detroit; and K. H. Johnson, M.D., Lansing.

- **Reorganization of The Council: William Bromme, M.D., Detroit, was re-elected Chairman; H. B. Zemmer, M.D., Lapeer, was again chosen as vice-chairman; W. S. Jones, M.D., Menominee, was re-elected head of the Finance Committee; D. Bruce Wiley, M.D., Utica, was a repeat as chairman of the County Societies Committee; and G. B. Saltonstall, M.D., Charlevoix, was given the post of Chairman of the Publication Committee.**
- **The monthly financial reports** were studied and approved as well as the semi-annual balance sheet. **Bills payable** were reviewed and ordered paid.
- *The Treasurer's Report* on bonds was presented by Wm. A. Hyland, M.D., given study, and approved.
- *Council Chairman Bromme* **reported on the** AMA Conference on Medical Care for Veter

(Continued on Page 1150)

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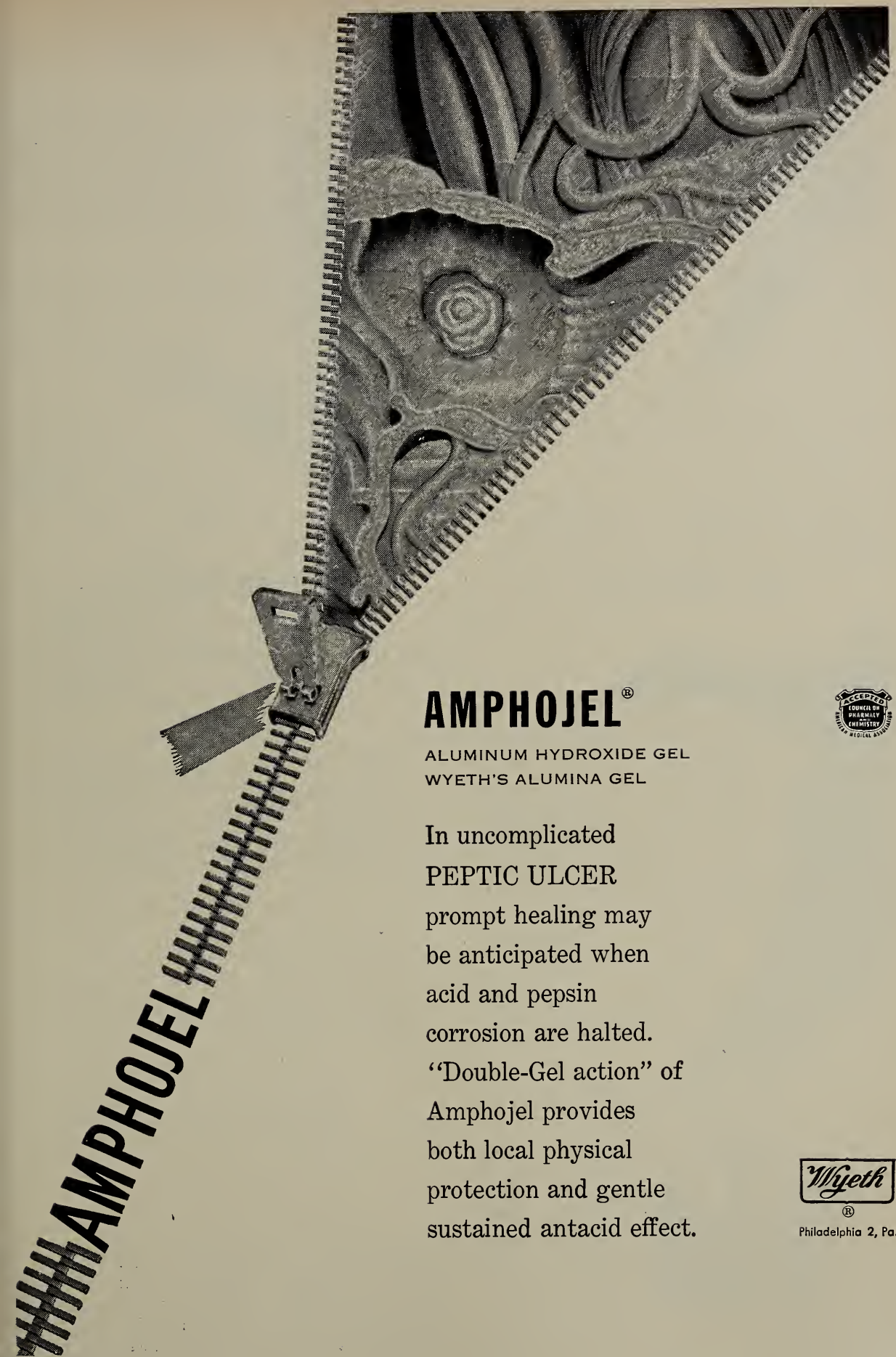
HIGHLIGHTS OF THE COUNCIL

(Continued from Page 1148)

ans, held in Chicago September 1. Speaker R. H. Baker, M.D., read a proposed resolution on the subject of veterans' medical care which is to be presented to the MSMS House of Delegates on September 21.

- **MSMS headquarters:** Renovation on the porch and reception room at 606 Townsend, Lansing, which began September 2, 1953, was reported. A hand-carved caduceus to be placed over the entrance was presented to the Society by Wm. M. LeFevre, M.D., Muskegon, who was tendered a vote of sincere thanks by The Council.
- **Report on recommendations to streamline the AMA,** were made by R. H. Pino, M.D., Detroit. A special committee recommended that these recommendations be forwarded to Michigan's AMA delegates to facilitate together with a suitable resolution by Michigan's delegates to the AMA House of Delegates; this disposition is to be reported in the Supplemental Report of The Council.
- **The recommendation of the Awards Committee** that the MSMS create an award for outstanding reporting of medical progress, and that this year the award be presented to Mr. Jack Pickering of the *Detroit Times* for outstanding contribution to public understanding of medical and health progress, was approved by The Council.
- **President-elect L. W. Hull, M.D., reported nominations and appointments** made to the Cancer Co-ordinating Committee, representing the Michigan Division, American Cancer Society, the Southeastern Michigan Division, American Cancer Society, the Michigan Department of Health, the Michigan Health Officers Association, the Michigan State Dental Society, and the Michigan State Medical Society.
- **Nominations for five vacancies** (as of September 30, 1953) on the **Michigan State Board of Registration in Medicine** were made and forwarded to the Secretary of State, as per Section 1 of the Medical Practice Act.
- **Plans for the Beaumont Memorial Dedication,** scheduled for Mackinac Island, Saturday, July 17, 1954, were discussed.
- **1953 MSMS Annual Session:** Secretary L. Fernald Foster, M.D., reported that the MSMS Executive Office had sent 42,898 individual mailings to advertise the 1953 Annual Session in an endeavor to achieve a record registration for Grand Rapids.
- A congratulatory letter was ordered sent to the John Hancock Insurance Company for its excellent national advertisement "He Must Be There" which appeared in various leading magazines during August, 1953.
- **A proposed Resolution on the Mental Hygiene Program of Michigan,** drafted by **H. B. Zemmer, M.D.,** was read and referred to the House of Delegates.
- **The County Societies Committee nominated three candidates for Michigan's Foremost Family Physician award:** Fred J. Drolett, M.D., Lansing; Joseph H. Sherk, M.D., Midland; and William J. Stapleton, Jr., M.D., Detroit. These nominations were referred to the House of Delegates.
- **The Supplemental Report of The Council** was read, amended in one item, and approved for reference to the 1953 House of Delegates.
- **The Sub-committee on Intern Training** (of the MSMS Committee on Postgraduate Medical Education) presented its report through H. A. Towsley, M.D., and J. M. Sheldon, M.D., of Ann Arbor, together with H. H. Cummings, M.D., of Ann Arbor, Chairman of the MSMS PG Committee. The Sub-Committee report was approved and ordered publicized in JMSMS.
- **The following committee reports were considered:** (a) **Insurance Studies Committee,** meeting of August 13 (b) **Advisory Committee to Michigan State Medical Assistants Society,** meeting of September 10 (c) **Meeting of Ubiquitous Hosts** for 1953 Annual Session, September 10 (d) **Awards Committee,** September 20 (e) **Rheumatic Fever Control Committee,** meeting of September 9 (f) **Conclusions of Study Committee on Basic Science Act** (including minority opinion) (g) **County Societies Committee,** meeting of September 20 (h) **Publications Committee** meeting of September 20.
- At the post convention meeting of September 25, **The Council tendered a rising welcome to the newly elected officers:** R. H. Baker, M.D., Pontiac, President-Elect; J. E. Livesay, M.D., Flint, Speaker; K. H. Johnson, M.D., Lansing, Vice-Speaker; William M. LeFevre, M.D., Muskegon, Councilor of the 11th District; and B. T. Montgomery, M.D., Sault Ste. Marie, Councilor of the 12th District.
- **Matters referred to The Council by the 1953 House of Delegates** were given study and referred to the October 22 meeting of the Executive Committee of The Council, to consider in the light of the transcribed Proceedings (to be indexed on October 18).
- **L. W. Hull, M.D., announced** the appointment of members of **1953-54 MSMS Committees,** which appointments were approved by The Council.
- **Official thanks to all who helped to make the 1953 Annual Session an outstanding success** (an all-time registration record for Grand Rapids was made with 3,266) were placed upon the minutes.

(Continued on Page 1152)



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HIGHLIGHTS OF THE COUNCIL

(Continued from Page 1150)

- **Ralph A. Johnson, M.D., Detroit,** President of the Wayne County Medical Society, reported on a plan to interest more activity for the Beaumont Memorial among Wayne County doctors of medicine. Dr. Johnson's letter and his suggestion to appoint a special committee, were approved.
- **Frank L. Rector, M.D.,** long-time Secretary of the MSMS Cancer Control Committee, presented his final report, prior to his retirement on September 30, 1953. A vote of thanks was placed on the minutes of The Council to Dr. Rector for "his untiring efforts in behalf of the cancer program of Michigan."
- **Matters of mutual interest were discussed with the Michigan Health Commissioner, A. E. Heustis, M.D.**
- **A vote of thanks was placed on the minutes to Dr. and Mrs. William A. Hyland** for their hospitality in opening their home for the Sunday, September 20, meetings of The Council.

WHAT THEY SAID ABOUT THE ANNUAL SESSION

This is the finest state medical exhibit that I have ever seen. . . . I was once more impressed with the excellence of your organization! . . . Your convention, of course, is in a class by itself. . . . A very excellent meeting—the show was worthy of a national convention. . . . Your kind hospitality and marvelous courtesy is outstanding. . . . You have a wonderful state; only wish we were able to stay longer. . . . MSMS is a fine organization. . . . It was a compliment and a thrill to meet your Society. . . . Meeting so many fine members of the medical profession was a deep pleasure. . . . Congratulations on a fine meeting. . . . There's so much work before, during and after a convention that does not appear to the eye—and is never fully appreciated. . . . We go to conventions to talk to M.D.'s and are sometimes disappointed because of lack of interest. Not so at your convention. Michigan is tops.

You put on a very fine scientific program—and your hospitality, we have never seen anything like it! . . . I thought the meeting was of high caliber; you have a better quality in your exhibits than one encounters in most of the State meetings. . . . I was only too happy to meet again many of my numerous friends from Michigan. I feel almost like a resident of Michigan myself. . . . We of the SAMA look to the State and county medical societies for leadership and guidance. . . . The meeting was one of the best state meetings I have ever attended, and the hospitality you extend to your guests puts the rest of us to shame. . . . I had no idea it was such a grand affair.

MEDICAL-LEGAL INSTITUTE DECEMBER 10-11

The Michigan State Bar Medical-Legal Institute conducted by the Law-Science Institute with the co-operation of the Michigan Law Institute will be held at the Sheraton-Cadillac Hotel, Detroit, on Thursday and Friday, December 10-11, 1953.

This extraordinary program is for the benefit of professional people (M.D.'s and Lawyers) concerned with personal injury claims. All members of the Michigan State Medical Society are cordially invited to attend.

Hubert Winston Smith, M.D., LL.B; Director of the Law-Science Institute of the University of Texas, will be the director of the Michigan Medical-Legal Institute.

The first session will be held Thursday, December 10 at 9:00 a. m.

Program Outline

Thursday Morning—December 10

Theme: Preparation and Trial of a Personal Injury Case by the Plaintiff.

The structure and Function of the Human Body.

Thursday Afternoon

1. Basic Scientific Principles of Traumatology.
2. Fundamental Knowledge Relevant to Traumatology of the Musculoskeletal System.
3. Fundamental Knowledge Relevant to Traumatology of the Nervous System.

Thursday Evening

(1) Trial Sequence
(2) Trial Provisions
(3) Cash present

Trial Procedure and Medicolegal Trial Technique additional presentations by two outstanding visiting trial lawyers.

Friday Morning—December 11

Theme: Preparation and Trial of a Personal Injury Case by the Defendant.

Traumatology of the Musculoskeletal System.

Friday Afternoon

Traumatology of the Nervous System.

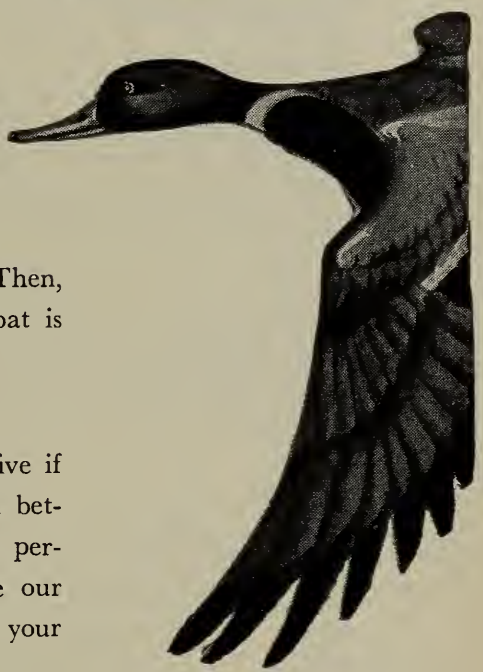
For program and complete details, write J. Adrian Rosenburg, Chairman, State Bar Committee on Medical Jurisprudence, Jackson City Bank Bldg., Jackson, *or* Milton E. Bachmann, State Bar Executive Secretary, Olds Tower, Lansing.





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Say you saw it in the Journal of the Michigan State Medical Society

Allegan County Wins Attendance Contest

At the record-breaking 1953 MSMS Annual Session, twelve component county medical societies were represented by 60 per cent or more of their membership!

Winner of the attendance contest was the Allegan County Medical Society, with nineteen of its twenty-three members signing in at the registration desk for a "batting average" of 82.6 per cent. For this accomplishment, the Allegan Society will gain a bonus in the form of a guest speaker of its choice, from any part of the United States or Canada, for one of its meetings. The speaker's expenses will be assumed by MSMS, under rules of the contest announced in July by The Council.

Other county medical societies with outstanding attendance records at the Grand Rapids Annual Session were: Kent, 76.6 per cent; Newaygo, 75; Eaton, 73.7; Ottawa, 72.3; Barry, 71.4; Muskegon, 69.9; Mecosta-Osceola-Lake, 68.8; Branch, 68; Van Buren, 66.6; Clinton, 66.6, and Ingham, 60.

MSMS ATTENDANCE BY COUNTIES

County Medical Society	Total Membership	Number registered at Annual Session	Percentage of members registered
Alpena-Alcona-Presque Isle	25	3	12.0%
Allegan	23	19	82.6%
Barry	14	10	71.4%
Bay-Arenac-Iosco	77	24	31.1%
Berrien	81	14	17.3%
Branch	25	17	68.0%
Calhoun	129	39	30.2%
Cass	10	2	20.0%
Chippewa-Mackinac	26	3	11.5%
Clinton	18	12	66.6%
Delta-Schoolcraft	23	3	13.0%
Dickinson-Iron	22	4	18.2%
Eaton	19	14	73.7%
Genesee	223	67	30.0%
Gogebic	20	1	5.0%
Grand Traverse-Leelanau-Benzie	43	20	46.5%
Gratiot-Isabella-Clare	41	19	46.3%
Hillsdale	18	8	44.4%
Houghton-Baraga-Keweenaw	28	3	10.7%
Huron	15	3	20.0%
Ingham	199	100	50.3%
Ionia-Montcalm	40	24	60.0%
Jackson	111	39	35.1%
Kalamazoo	149	74	49.7%
Kent	320	245	76.6%
Lapeer	16	7	43.8%
Lenawee	42	8	19.0%
Livingston	17	3	17.6%
Macomb	50	14	28.0%
Manistee	13	7	53.8%
Marquette-Alger	40	1	2.5%
Mason	11	2	18.2%
Mecosta-Osceola-Lake	16	11	68.8%
Menominee	18	3	16.7%
Midland	28	11	39.3%
Monroe	33	6	18.2%
Muskegon	93	65	69.9%
Newaygo	8	6	75.0%
North Central Counties	21	6	28.6%
Northern Michigan	34	11	32.4%
Oakland	233	38	16.3%
Oceana	11	5	45.5%
Ottawa	47	34	72.3%
Saginaw	135	38	28.1%
Sanilac	12	2	16.7%
St. Clair	62	7	11.3%
St. Joseph	23	12	52.2%
Shiawassee	27	7	25.9%
Tuscola	19	8	42.1%
Van Buren	24	16	66.6%
Washtenaw	312	44	14.1%
Wayne	2302	259	11.3%
Wexford	14	5	35.7%

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You and the Michigan Business Receipts Tax

The new Michigan Business Receipts Tax as it applies to doctors of medicine and other professional men is relatively simple. The tax is computed at the rate of 4 mills per $1.00 or $4.00 per $1,000 of adjusted receipts. The term "adjusted receipts" means the gross receipts of the taxpayer less certain allowable deductions or 50 per cent, whichever is greater.

In the case of doctors of medicine, the allowable deductions would be rent, cost of drugs and instruments purchased (except capital investments such as x-ray machines, et cetera), heat, light, water and numerous other similar expenses. Salaries paid are not deductible.

Therefore, in the majority of cases the doctor will find it to his advantage to use the minimum deduction of 50 per cent of his gross receipts. After making the deduction, each taxpayer is allowed an exemption of the first $10,000 of adjusted receipts.

Here's How

To illustrate, let us assume that the doctor has gross receipts of $30,000. His deductions for rent, heat, lights, etc., do not equal 50 per cent of his gross receipts, therefore, he uses the minimum deduction of 50 per cent or $15,000, leaving him with a taxable income of $15,000. From this amount he is entitled to deduct as his annual exemption his first $10,000 of adjusted receipts. This amount deducted from the $15,000, leaves a net taxable remainder of $5,000 against which the tax rate is applied with the net tax due for the year of $20.00. From the above example it is plain that until the gross receipts of a taxpayer exceed $20,000 there would be no tax due.

File Quarterly Reports

The statute requires the filing of quarterly returns which are to be filed on or before the last day of the month following the close of each quarter. The return which is filed at the end of the year is called the annual return. The quarterly returns may be estimated and any adjustments made at the time of the filing of the annual, verified return.

In the case of a taxpayer who is in partnership with others, the partnership is considered to be the taxpayer rather than the individual partners, and regardless of the number of co-partners, there is only one $10,000 deduction for the co-partnership.

Detailed information as to specific problems may be obtained by writing the Michigan Department of Revenue, 200 Tussing Building, Lansing.

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The N.N.R. monograph on Furadantin states:

"Nitrofurantoin.—Furadantin (Eaton).—

Actions and Uses.—Nitrofurantoin, a nitrofuran derivative, exhibits a wide spectrum of antibacterial activity against both gram-positive and gram-negative micro-organisms. It is bacteriostatic and may be bactericidal to the majority of strains of Escherichia coli, Micrococcus (Staphylococcus) pyogenes albus and aureus, Streptococcus pyogenes, Aerobacter aerogenes, and Paracolobactrum species. The drug is less effective against Proteus vulgaris, Pseudomonas aeruginosa, Alcaligenes faecalis, and Corynebacterium species; many strains of these organisms may be resistant to it. However, bacterial resistance to other anti-infective agents is not usually accompanied by increase in resistance of the organisms to nitrofurantoin. The drug does not inhibit fungi or viruses.

Nitrofurantoin is useful by oral administration for the treatment of bacterial infections of the urinary tract and is indicated in pyelonephritis, pyelitis, and cystitis caused by bacteria sensitive to the drug. It is not intended to replace surgery when mechanical obstruction or stasis is present. Following oral administration, approximately 40% is excreted unchanged in the urine. The remainder is apparently catabolized by various body tissues into inactive, brownish compounds that may tint the urine. Only negligible amounts of the drug are recovered from the feces. Urinary excretion is sufficiently rapid to require administration of the drug at four to six hour intervals to maintain antibacterial concentration. The low oral dosage necessary to maintain an effective urinary concentration is not associated with detectable blood levels. The high solubility of nitrofurantoin, even in acid urine, and the low dosage required diminish the likelihood of crystalluria.

Nitrofurantoin has a low toxicity. With oral administration it occasionally produces nausea and emesis; however, these reactions may be obviated by slight reduction in dosage. An occasional case of sensitization has been noted, consisting of a diffuse erythematous maculopapular eruption of the skin. This has been readily controlled by discontinuing administration of the drug. Animal studies, using large doses administered over a prolonged period, have revealed a decrease in the maturation of spermatozoa, but this effect is reversible following discontinuance of the drug. Until more is known concerning its long-term effects, blood cell studies should be made during therapy. Frequent or prolonged treatment is not advised until the drug has received more widespread study. It is otherwise contraindicated in the presence of anuria, oliguria, or severe renal damage.

Dosage.—Nitrofurantoin is administered orally in an average total daily dosage of 5 to 8 mg. per kilogram (2.2 to 3.6 mg. per pound) of body weight. One-fourth of this amount is administered four times daily—with each meal and with food at bedtime to prevent or minimize nausea. For refractory infections such as Proteus and Pseudomonas species, total daily dosage may be increased to a maximum of 10 mg. per kilogram (4.5 mg. per pound) of body weight. If nausea is severe, the dosage may be reduced. Medication should be continued for at least three days after sterility of the urine is achieved."

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Cancer Comment

LOCAL HEALTH DEPARTMENTS AND CANCER CONTROL

Understanding the cancer problem and measures for its control are not difficult matters to the person of average intelligence. There are a few facts that must be understood in order to motivate the layman to take appropriate action when action is necessary. Details of diagnosis and treatment are matters for medical opinion and decision. Laymen should know *when* to take action and *what* this action should be. Everyone should know that:

1. Every cancer and suspected cancer patient demands immediate diagnostic and treatment attention. Delay is always dangerous and may be fatal.

2. The periodic medical examination by the family physician in the absence of signs or symptoms is the best protection against the development of cancer to the incurable stage.

The place of the local medical society in a cancer control program has been adequately discussed in the pamphlet, "Role of the Cancer Committee of the County Medical Society in Cancer Control," recently published by the Cancer Control Committee, Michigan State Medical Society, and placed in the hands of the county medical society officers. Health department personnel should join forces with the medical profession in directing local cancer education programs. These two organizations should take the lead in supplying the scientific information for the benefit of their community. Such leadership calls for co-operation, not competition.

Among the many things the local health department can do in the cancer education field are the following, not listed necessarily in the order of their greatest importance, nor are all possibilities for education and service mentioned.

1. Local health department personnel should co-operate with local physicians and hospitals in diagnosis, treatment and care of cancer patients.
2. Public health nurses often can assist in tumor clinics and in followup observations on cancer patients who have been under treatment.
3. Nurses can assist in solving economic problems that may arise with cancer patients.
4. Educational activities, such as "cancer teaching days," for local medical, dental and nursing professions should be supported.
5. All recognized educational media should be utilized to spread knowledge of cancer and measures for its control to all population groups of high school age and over.
6. Teachers, especially science teachers in high schools and colleges within the health department's jurisdiction, should be instructed in the fundamentals of a cancer control program and aided in developing methods and content of classroom instruction in this subject.
7. Interest of high school students can be intensified by supplying them with information for poster and essay writing contests on cancer subjects.
8. The placing of authoritative books and pamphlets on cancer in public and school libraries should be encouraged and listing of publications on cancer from questionable sources should be discouraged.
9. Newspapers and radio broadcasting stations should be supplied with suitable material on cancer containing as much local color as possible.
10. Health department personnel, when conducting health examinations among school and community groups, should always keep the possibilities of cancer in mind, and know, as far as possible, that its presence has not been overlooked or misinterpreted.
11. Where cancer is known or strongly suspected, health personnel should exhaust all proper measures to get that patient under competent medical supervision. Many such patients will be encountered in routine contacts with the public.
12. While the annual number of cancer deaths in a local area is too small for statistical study, unless the area includes a large city, the fullest possible use should be made of such records to further understand the local cancer problem and to emphasize the need for more education, the finding of early cases, and their adequate treatment.
13. In co-operation with local physicians and hospitals, a registry should be established for all cancer patients residing in the local health jurisdiction. In time, such a registry will greatly increase knowledge of the incidence and prevalence of cancer, accurate knowledge of which is practically nonexistent at the present time.
14. Co-operate with all lay organizations in worthwhile cancer education and control programs.
15. By being informed about cancer and in keeping with their duties and responsibilities to render a constructive health service, public health personnel can and should become the balance wheel or "governor" to control unwise activities of over-enthusiastic or self-seeking interests in prosecution of the cancer program in their communities.

In addition to the projects listed, any interested local health department personnel can find many other constructive activities in the local cancer control field.

Cancer of the breast rarely occurs in women whose ovaries have been removed surgically at some previous time.

* * *

Cancer of the prostate gland has never been reported in a eunuch.

* * *

Cancer occurring in pregnancy, when hormone manufacture is abnormal and at a high level, has a notoriously bad prognosis.

* * *

When cancer occurs in or is transplanted to experimental animals, the morphology of the endocrine glands is seriously changed.

The JOURNAL

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Newer Concepts Concerning Tuberculosis During Childhood

By Milton I. Levine, M.D.
New York, New York

IN DISCUSSING the subject of tuberculosis during childhood it is extremely important that, at the very outset, there be a clear understanding of the difference between primary tuberculosis and reinfection tuberculosis. This understanding is necessary in any discussion of pathology, treatment and prognosis.

Primary tuberculosis is the form the disease takes when tubercle bacilli become implanted on body tissue not yet sensitized to tuberculin. Hematogenous tuberculosis such as miliary tuberculosis, tuberculous meningitis, tuberculous joints, spine, kidney, et cetera, are usually complications of primary tuberculosis.

Reinfection tuberculosis, which is usually much more severe than uncomplicated primary tuberculosis, occurs when tubercle bacilli become active on tissue already allergic to tuberculin, differs greatly in pathology, in treatment and also in prognosis. It is almost as if one were dealing with an entirely unrelated disease.

It shall be the purpose of this paper to limit the discussion to primary tuberculosis and its complications since, with few exceptions, this is the type of the disease observed in children.

The mortality curve from tuberculosis during the various years of childhood is well known to all pediatricians—an abrupt rise to a peak during the first two years of life, then an abrupt decline with a very low level between the ages of three years and thirteen years, and then the rise which occurs during puberty.

It is of interest to note that of all the factors involved in primary tuberculosis the most important in prognosis is the age of the child. A child with a primary pulmonary tuberculosis under twelve months of age, unless treated with our modern antibiotics, has only about a 50 per cent chance of surviving the disease, whereas a child of five years of age with the same tuberculous pulmonary pathology has better than a 95 per cent chance of survival.[6,7]

The physician presented with a child with primary tuberculosis is confronted with a number of important questions.

1. Should the child be given bed rest or permitted to remain ambulatory?
2. If a child with primary tuberculosis is hospitalized should contagion precautions be observed?
3. Should antibiotic therapy be used in uncomplicated primary tuberculosis?
4. At our present stage of knowledge what therapy is most advisable for miliary tuberculosis, tuberculous meningitis and tuberculous adenitis?

Sufficient evidence has been gathered in the United States to indicate that uncomplicated primary tuberculosis runs its course regardless of whether or not a child receives bed rest. In our own studies of cases followed through the Department of Health in New York City, children were placed in bed only during febrile periods which occurred at the onset. Once the fever had subsided they were permitted activity without restriction, even attending school. There was no evidence, statistically or otherwise to indicate that

From the New York Hospital—Cornell Medical Center, Department of Pediatrics.
Presented at the Eighty-Seventh Annual Session, Michigan State Medical Society, Detroit, September 25, 1952.

this unrestricted activity had any harmful effect. The lesions cleared just as quickly and there were no more complications than were found among controls.[11] This is in complete agreement with the findings of Dr. Jay Arthur Myers at the Lymanhurst Clinic in Minneapolis.[12]

However, it must be stated that Dr. Arvid Wallgren of Sweden has expressed disagreement with this plan of treatment.[15] He maintains his patients at bed rest until the sedimentation time has subsided, and places some limitation on their activity for the following year.[16] Wallgren claims that ambulation leads to complications. It may be that this is true in Europe, for there is every reason to believe that there is some difference in bodily reaction to tuberculosis on the Continent. Among the frequent complications of primary tuberculosis in Europe are erythema nodosum and pleural effusion. Erythema nodosum is almost never seen associated with tuberculosis in this country, and tuberculous pleural effusions are rare in children.

However, occasionally there are children with primary tuberculosis who are hospitalized—and the question always arises as to what precautions should be taken. Just how contagious are these children? At the present time there are many hospitals that will not accept on their wards a child with a diagnosis of tuberculosis for fear of extra problems that might arise, such as special precautions, added nurses and nursing techniques.

It should be stated, based on numerous studies, that uncomplicated primary tuberculosis is not contagious—and no need exists for special precautions. No tubercle bacilli enter the bronchial tree from the area of pulmonary infiltration. What few organisms may be found in the gastric washings enter the trachea through perforations of the caseous lymph nodes adjacent to the bronchial tree or trachea. But the organisms discovered are so few that they are very rarely seen on smear, being only obtained by culture or animal inoculation. The New York Tuberculosis and Health Association has just prepared a statement to the effect that primary tuberculosis, unless complicated, is not to be considered as contagious. This fact has been confirmed by Dr. Arvid Wallgren.

Several further questions arise concerning the primary phase of tuberculosis.

Is there any indication for the use of antibiotics in the treatment of this condition?

Here again we must turn back to the mortality chart and observe the two periods of relative susceptibility: the first three years of life where the tuberculosis mortality rate is very high, and the following nine years (up to twelve years of age) when the body is highly resistant and the tuberculosis mortality is extremely low.

Now any disease with a mortality of 50 per cent during the first year of life deserves heroic treatment. During the years from 1946 to 1952 when streptomycin was the only really potent antituberculous agent available, the question of its use in treating primary tuberculosis of infancy arose frequently.

As a rule such treatment was withheld for the tendency of the tubercle bacilli to develop a resistance had to be considered—and if such resistance was developed in the course of a simple primary—there would be no drug to fall back on if there were a hematogenous spread of streptomycin resistant organisms resulting in miliary tuberculosis or tuberculous meningitis.

Today we are treating a number of primary tuberculosis cases with isonicotinic acid hydrazide. The infant may be treated at home since the medication is given by mouth with practically no side-effects. The dosage given is 5 to 8 mg. per kilogram, and the infant is followed frequently with x-rays and physical examinations. So far in the few cases we have followed there has been no hematogenous spread. Should one occur, streptomycin could then be added in the treatment.

It is interesting to note that, as far as we can judge, at the present time, there is no increased speed of disappearance of the primary tuberculous pulmonary infiltration when under treatment of streptomycin or isonicotinic acid hydrazide. In many cases where a miliary spread is a complication of a pulmonary primary, the lungs clear completely of the miliary lesions under antibiotic therapy but the original primary pulmonary infiltration remains.

There would not appear to be any great need for antibiotic treatment of uncomplicated primary tuberculosis in children between the ages of three and twelve years for these children will usually recover completely without complications.

In cases of miliary tuberculosis, tuberculous meningitis, and progressive primaries the use of these newer drugs is certainly indicated.

The term progressive primary is often misunderstood. It may be explained as a primary infiltration which, instead of subsiding down and leaving a calcified Ghon's primary lesion, progresses, cas-

eates, and finally cavitates. Such a tuberculous cavity in a child's lung should be treated exactly as a tuberculous cavity in an adult's lung.

Although experience at the moment is limited it would seem advisable in these severe complications of primary tuberculosis to use both streptomycin and isonicotinic acid hydrazide concurrently.

Probably 8 mg. per kilogram daily of isonicotinic acid hydrazide divided into two or three doses is the optimium treatment.

As far as we know at the present time there are no harmful effects from use of isonicotinic acid hydrazide. The symptoms most noted during its usage, none of which is of any importance, are hyper-reflexia, vertigo which may appear during the early weeks of treatment but which gradually subsides completely, constipation, which also may occur during the early weeks but which also disappears, and once in a while urinary bladder retention which is also temporary.

A good deal has also been written recently about built-up resistance of the tubercle bacilli to isonicotinic acid hydrazide. This has been demonstrated on culture media and also from tests of tubercle bacilli from the bodies of treated patients.

However, I have been informed by Dr. Walsh McDermott who has had a good deal of experience with this drug, that resistant tubercle bacilli can be found in the sputum of patients who have never had any contact with the drug. In his opinion these tests are of very little, if any, significance in determining the efficacy of isonicotinic acid hydrazide—and it is of greatest importance to note that in the studies of Solikoff and Robitzek at Sea View Hospital in New York; in the studies of McDermott and Tomsett on the American Indians, and in the studies of Dr. Edith Lincoln at Bellevue Hospital in New York, there have been no relapses[13]—an occurrence which was met only too frequently in treatment with streptomycin.

The question also frequently arises concerning the possible use of streptomycin or isonicotinic acid hydrazide in cases of tuberculous adenitis. Most frequently the subject is brought up in relation to tuberculous cervical adenitis, but occasionally it relates to an enlargement of hilar nodes which are occluding a bronchus and causing an atelectasis.

There has been no evidence that caseous nodes respond to any of the antibiotics.

Tuberculous cervical adenitis may be treated successfully in several ways by the use of streptomycin. In a number of cases the nodes have been removed surgically after preparation by a daily dose of 1 gm. streptomycin for two weeks, and followed by 1 gm. daily for two more weeks. This method may also be used with isonicotinic acid hydrazide. The results using the latter drug should theoretically be as favorable as those obtained with streptomycin, but adequate experience is as yet lacking.

We have not, in our clinic, seen any favorable results on treating cold abscesses by the use of isonicotinic acid hydrazide. In one case we have had a child with a draining cervical node on this drug for six months without any noticeable improvement. We are now referring this child for surgical excision of the node.

We have used one other method successfully in the treatment of tuberculous cervical adenitis. The children were treated with streptomycin 0.5 gm. three times a week until the node became fluctuant. Then a large needle (16 guage) was inserted through the skin about one inch from the node and directed into the node. The contents of the node were withdrawn, and leaving the needle in place, 1 gm. of streptomycin in solution was inserted. This was repeated every week until fluctuation no longer existed—a condition usually lasting only two or three weeks. If this treatment is successful, no necrosis of the skin takes place and no scar follows.

The situation is considerably more complicated in relation to enlarged hilar nodes which are either causing an atelectasis of long duration or an obstructive emphysema which may result in considerable dyspnea. If removal of the node is considered of importance it is probably best removed through the chest wall. There have been cases in the past where such obstructive nodes were removed by bronchoscopic surgery—but today with newer techniques the excision can be more safely performed by thoracic surgeons.

Considerable question has arisen within the past year concerning the use of tuberculin, streptodornase and streptokinase in the treatment of tuberculous meningitis. Their use lies in the digestion of fibrin. As you know, streptokinase and streptodornase are used in tuberculous empyemas and in the treatment of hemothorax. Dr. Renee DuBos has pointed out that in cases of tuberculous meningitis where the spinal fluid contains very few

tubercle bacilli, there is a marked increase in the number of tubercle bacilli following the intrathecal injection of tuberculin.[8] This would seem to indicate that the fibrin masses holding the tubercle bacilli have resolved freeing the organisms.

However, in practice severe reactions occur with all three of these agents when such treatment have been attempted on children with tuberculous meningitis. At the present time such use is contraindicated unless a block occurs in the spinal canal.

I might add with respect to intrathecal tuberculin therapy in tuberculous meningitis that Cairus and Smith of Oxford reporting favorably on its use stated that ten of thirteen patients (treated with tuberculin and streptomycin) who initially were in coma or delirium, were alive twelve months after treatment.

In New York, New York, Dr. Edith Lincoln used PPD intrathecally on seven patients. Of these only one survived. Of course, the cases chosen were severe with signs of spinal block, where the mortality would be unusually high.[13]

Children who develop caseous pneumonic tuberculosis whether as the result of a progressive primary, or a reinfection tuberculosis, should be treated very much like adults with the same condition. Thin-walled cavities may respond to streptomycin and isonicotinic acid hydrazide. Thick-walled cavities should be treated either with pneumothorax or surgical excision of the infected lobe or area. Fortunately, the lung tissue of a child is much more elastic than that of an adult, and when a portion of the lung is removed, the remaining lung tissue expands and fills the thoracic space without difficulty.

Thoracoplasty in the young child is contraindicated for as the body grows the chest distortion becomes very pronounced, and may even cause cardiac difficulty in later years.

The prophylaxis against tuberculosis still centers largely around the use of BCG. As is generally known this vaccine has been given to over 60,000,000 persons throughout the world, largely through the efforts of the World Health Organization. In certain countries its use is obligatory.

In 1950, the U. S. Public Health Service licensed the Research Foundation of the University of Illinois for the manufacture, exportation, importation, and sale of BCG. However, Dr. Robert Anderson and Dr. Carol Palmer stated that it was the most unstable vaccine so licensed in the United States, and recommended that until more stable immunization agents were perfected its use be limited to those persons who were particularly vulnerable to the disease—such as physicians, nurses, medical students, et cetera.[1,2]

But although BCG has been used on human beings since 1922 a great many facts concerning it are still unknown.

To date no adequate means of stabilizing the potency of the vaccine has been perfected. No means has been developed to assure that similar amounts of BCG from different laboratories would have equal numbers of viable organisms and equal potency.

It should be understood that BCG is a vaccine of living attenuated bovine tubercle bacilli and its effectiveness depends on the number of viable organisms in the solution. The first difficulty to overcome is the rapid loss of viable organisms in the prepared vaccine. Dr. Renee Dubos of the Rockefeller Institute found that there is a loss of 90 per cent of the viable organisms within the first twenty-four hours if the vaccine is not kept under constant refrigeration. Similar findings were reported by Aronson, Schneider and Jensen.[3,10]

Attempts have been made to stabilize the vaccine by lyophilization, but 90 per cent of the viable organisms die in the course of the process.[3,4,5] However, the living BCG organisms that remain may live for more than a year if maintained at a temperature of 2 to 4 degrees centigrade.

More recent experiments have demonstrated that BCG cultures grown in Tween 80-albumin medium maintain their viability for at least four months whether at room temperature or on refrigeration.[9]

But the rapid loss of viability is the lesser of the two major problems confronting the investigator. More complicated is the marked variation in the potency of the same amount of vaccine from different laboratories.

According to Dubos and Suter[14], if a specified amount of living BCG organisms from three different laboratories is inoculated into the skin of guinea pigs, there is found to be a specific difference between each vaccine in the size of the local lesion and the persistence of the lesion. Reactions from intraperitoneal inoculations are also specific for each type of vaccine.

In further studies at the Rockefeller Institute, Dr. Werner Scheffer used BCG vaccine from four

different sources—Phipps Institute, Tice Institute, the New York State Department of Health, and the World Health Organization BCG Center at Copenhagen. He found that the local lesions caused by the individual vaccines differed markedly, even when the same number of living bacilli were inoculated. As a matter of fact a given number of living BCG organisms from one laboratory produced routinely a local lesion twenty-seven times as large as a local lesion produced by exactly the same number of viable bacilli from another laboratory.[13]

However, a great deal of evidence has been accumulating to indicate that BCG vaccine is capable of conferring a partial immunity on those inoculated, but a degree of immunity far below that attained by the use of diphtheria or tetanus toxoid or through smallpox vaccination. The exact degree of immunity received through BCG and the deviation of the immunity are at present unknown and probably variable. Most workers have assumed that the immunity is maintained as long as the skin retains its post-vaccination tuberculin reaction.

But in spite of this partial knowledge concerning BCG vaccine, it is being widely used throughout the world.

Why then has its use not been adopted as a public health measure in the United States? The answer is that in the United States antituberculosis measures such as case-detection, separation of contacts, hospitalization, mass x-ray studies, removal of tuberculin-positive cows, and pasteurization of milk have attained a high degree of success.

As an example one might take the city of New York with its crowded living quarters, with a negro population of over 540,000 as well as a large Porto-Rican population. In 1915, there were 1,200 deaths from tuberculosis among children under the age of fifteen years (eighty-one per 100,000). In 1948, the tuberculosis deaths among this age group had dropped to seventy-four (four per 100,000). A fall of over 95 per cent—and this all occurred during a period when only the usual antituberculosis methods were being used. This was just before the general use of streptomycin. These figures are superior to any published from countries and localities claiming benefit due to BCG inoculation. In the United States as a whole the tuberculosis mortality has dropped from 202 per 100,000 in 1900, to only 22.2 per 100,000 in 1950. I believe in Michigan it is seventeen per 100,000.

However, the use of BCG is indicated as a public health measure in countries or localities where antituberculosis measures are difficult to carry out, in spite of the fact that as a vaccine it is far from perfect.

Before leaving the subject of BCG, it should be emphasized that this vaccine is entirely safe, and there is no general reaction following its use, such as fever or pain.

If it is to be used in its present form it would seem to me that its greatest benefit would be in adolescents and young adults in environments where they might be exposed to tuberculosis.

There is reason to believe that in a fair number of adolescents and young adults a primary tuberculosis pulmonary lesion, instead of subsiding and ending in a calcified Ghon's lesion, may become progressive, caseate in its center and cavitate—in other words become a progressive primary case of tuberculosis.

In giving BCG the point of inoculation, whether it be in the upper arm or thigh, serves as the primary focus—and there will be no primary tuberculosis pulmonary infiltration.

This has been, of course, a brief summary of certain subjects relative to tuberculosis in childhood. There is still a great deal to be learned, especially as regards the prophylaxis and treatment of this disease.

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Anesthesia Accidents

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SPACE does not permit a detailed account of each accident that has occurred in connection with the administration of an anesthetic. I will attempt, however, to discuss in a general way certain categories of accidents and some of the conditions which tend to produce these accidents.

One of the most important considerations before administration of anesthetic agents is started is identification of the agents by actual reading of the labels on the containers and verification of the substance therein. If a gas machine which has been used the night before is to be used in the morning, the anesthetist must make sure that the material in the ether bottle is identified as ether. I have seen a situation in which the ether bottle had chloroform in it and this was not recognized by the person who was administering it until the patient stopped breathing. No untoward result occurred, but it was only because of the skill of the administrator who quickly realized by the patient's reaction that he was not giving ether.

The use of various gases has been associated with unfortunate results in instances in which a cylinder containing a different gas than the one to be used has been installed in a yoke and has been administered; for example, two anesthetic gases have been administered simultaneously when it was intended that only one gas should be administered with oxygen. Fortunately, a solution of this problem has been accepted by the manufacturers of compressed gas, The American Society of Anesthesiologists and all others concerned. The plan is to use a pin-index safety system so that only the proper cylinder can be attached in a given yoke. It is planned that all gas machines will be equipped with this device in 1953.

Another preanesthetic effort is directed at the elimination of static electricity with the hope of eliminating fire and explosion hazards. The National Fire Protection Association set up standards in the past, some of which were impractical, and considerable revision was made in 1944. Conductive flooring is now mandatory in operating rooms as are explosion-proof switches. Other rules have been established with regard to roentgen-ray viewboxes, and so forth. The recommended safety measures are good if they are used properly, but the fallacy in the regulations lies in the fact that they give the impression that safety can be purchased. For example, at considerable expense conductive flooring may be installed, but if the persons in the room wear rubber-soled shoes, the conductive flooring can do no good because they have insulated themselves from the floor. Yet each person may feel safe because he knows the flooring is conductive.

The same institution might have explosion-proof connections and switches, but if an extension cord is added to an electrical connection and is connected and disconnected during the operation, the benefit of the explosion-proof connections is void. The people who work in the room need to have some information about these things. If the floor is conductive, the machines and persons must be grounded to the floor. This requires a drag chain for the equipment and leather-soled shoes that are slightly damp for personnel. Also, if ordinary terrazzo flooring has been installed, it is helpful to have it mopped with water that has a little salt in it, because this makes it more conductive.

A relative humidity of 50 per cent or more in the operating room helps in the battle against static electricity. Although humidity in the operating room is desirable, it is not in itself particularly effective in preventing static sparks and therefore it is not a wholly reliable factor. In the operating rooms the proper type of carbon dioxide fire extinguisher for use on fires caused by ether, alcohol and other inflammable materials should be readily available. Containers for inflammable materials such as ether, alcohol and various antiseptics should be removed from the room when not in use unless they are nonbreakable containers made of metal or plastic. A glass bottle containing ether or alcohol may become a real hazard in the operating room. In the excitement of a small fire, someone may inadvertently knock over and break glass containers causing a flash fire; this happens too frequently.

It is essential, therefore, that each person in the operating room be fully informed on how to conduct himself to avoid fire and explosion regardless of whether safety measures have been in-

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stalled, and if fire and explosion occur in the operating room, each person must know that he must keep away from sources of ignition such as materials that will burn or explode.

These accidents that can happen during the administration of inflammable anesthetics demand the serious attention of those who deal with such situations, and it is only by strict attention to the avoidance of such hazards that we can hope to reduce the incidence of accidents with anesthetics.

It would be of little value for me to relate incidents of accidents which have occurred without offering constructive suggestions on how to avoid accidents. Once the anesthetic has been chosen, the posture of the patient should be considered. Sometimes the upright position, with the patient's head elevated, or even the sitting position means that the anesthetist must guard against certain untoward results that may be associated with the patient's position while a general anesthetic is being administered. Generally speaking, the untoward results include a marked fall in blood pressure, shock, and some degree of anoxia. One of the conditions probably most often associated with cardiac arrest is a degree of anoxia to which the heart will not adapt itself. The anesthetist must be prepared to change the patient's position, to ventilate the patient well with oxygen and to support the blood pressure. The ability to change the operative position rather quickly must be planned so that nothing will interfere with its accomplishment.

The use of an endotracheal tube in the upper respiratory passage provides a good airway and tends to take care of pulmonary ventilation either naturally or artificially. One of the accidents that can occur if the patient is in the sitting position and the endotracheal tube is either too long or for some reason gets pushed down into the trachea so that the tip of the tube lies beyond the bifurcation of the trachea, is a bizarre type of respiration and probably some cyanosis with some effect on pulse and blood pressure. All of these conditions will be relieved quickly if the endotracheal tube is withdrawn an inch or two as a test to make certain that it has not dropped down too far in the trachea.

If the blood pressure has fallen, blood or fluids must be administered. The early preparation for this effort means that a large bore 15-gauge needle with a stilet should be introduced into a vein while the patient is in good condition and the veins are well filled, and the most ideal time is just as soon as surgical anesthesia has been established and before the operation starts. Many physicians wish to start the flow of fluid at the beginning of the operation. We now have available blood of proper group and Rh which can be cross-matched before operation so that all that needs to be done is to connect the dripper to the bottle, fill the tubing, withdraw the stilet from the needle and connect the tubing to the needle. If the state of shock is advanced the veins will not accept cold blood rapidly because of venospasm. It is interesting to know that after 100 or 200 cc. of fluids or blood has been administered, the rate of flow may suddenly increase considerably without any adjustment having been made to the device. This usually indicates a decrease in spasm associated with a definite rise in blood pressure and is a good sign.

Plasma is being used less and less because of the hazard of virus hepatitis. A solution of 5 per cent dextrose in water is used commonly; isotonic sodium chloride solution is seldom used but plasma volume expanders, such as dextran, polyvinyl pyrrolidone and gelatin, are being used more and more and are effective.

A recent hazard has been discovered in anesthetizing patients who have long been treated with cortisone or ACTH (adrenocorticotropic hormone) and then have been taken off treatment with these hormones. If these patients are anesthetized and operated on, they may go into sudden, fatal shock any time during the operation or during the first day after operation.

Such a large number of conditions are being treated with cortisone or ACTH that from now on this hazard must be recognized, and when the patient is being questioned, probably the next question after he has been asked if he has artificial teeth might well be "Have you ever been treated with cortisone or ACTH?" Usually he will know because the material has been relatively expensive.

It is advisable to have at hand 50 cc. bottles of adrenocortical extract, cortisone or hydrocortisone (100 mg. in 500 cc. of saline solution) to be given intravenously. Adequate protection may be afforded, if the patient is given 200 mg. of cortisone intramuscularly for two days before the operation, on the day of operation and for one or two days after operation with gradual reduction of doses to the maintenance level. It is possible that in the future the anesthetized patient in a state of

shock who does not respond to ordinary treatment may be helped by intravenous injections of hydrocortisone or adrenocortical extract or some new substance yet to be discovered regardless of whether shock is associated with previous treatment with cortisone or ACTH.[1,2,3,4]

A type of balanced anesthesia is now being used which is relatively free from the hazard of fire and explosion; namely, pentothal sodium and curare administered intravenously plus nitrous oxide and oxygen (50 per cent each) by inhalation. Patients are more safely and easily handled if an endotracheal tube has been inserted. The possibility that laryngospasm will occur at the time of intubation is considerable, but spraying the throat with a 10 per cent solution of cocaine or some other surface anesthetic agent will help greatly. If obstruction occurs and tracheotomy is being considered, it may be desirable to insert a 13-gauge needle into the trachea from the outside before tracheotomy is done.

Pentothal sodium as well as curare is a respiratory depressant, and if these drugs are given rapidly cessation of diaphragmatic motion will occur. This should be avoided. If it happens, however, artificial respiration must be started by means of a gas machine and alternate pressure on the breathing bag to inflate the lung with oxygen. The effects of curare may be neutralized by administration of tensilon, which has aided greatly in the control of such a situation. The use of tensilon has become important in electroshock therapy for patients who are mentally ill. Curare is given to prevent fracture of bones; pentothal sodium is given so that the patient does not undergo the unpleasantness of the treatment, and tensilon is administered to neutralize the effect of curare because of the shortness of the treatment.

If a patient has been given a dose of morphine and morphine poisoning occurs either because the dose of morphine was large or because the patient does not tolerate morphine, then nalline (N-allylnormorphine hydrochloride) may be used to neutralize the effect of the morphine. Unless morphine was given, however, the nalline alone will produce a morphine-like effect. Occasionally spasm of the sphincter of Oddi, also known as "postcholecystectomy syndrome," will develop after morphine has been given in the bedroom and the patient has been brought to the operating room, extreme pain may develop in the abdomen to the consternation of everyone present. If the pain is due to spasm of the sphincter of Oddi, an intravenous injection of 0.2 gm. of sodium nitrite will give relief in less than a minute and the surgeon may proceed with the operation.

One of the terrible tragedies that can occur in so far as the anesthetist is concerned is putting the patient to sleep without properly identifying him. This must be guarded against constantly.

One means of avoiding anesthesia and postoperative tragedies is the use of the postanesthesia observation room (P.A.R.) where the patient is sent after operation and where he remains until he is able to answer questions, obey orders and do some things for himself. Such rooms have been available in some hospitals since 1942 and the service in them has been increased and expedited. Many have excellent facilities such as suction devices, needles, syringes, all the equipment for placing endotracheal tubes and for administering blood plasma volume expanders, fluids and stimulants, and all the things that might be needed occasionally and that cannot be available in every bedroom in the hospital. The economic value of such a room is great since it reduces the number of nurses required to care for surgical patients.

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Psychiatry for the General Practitioner

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IT IS my firm belief and conclusion after years of study and practical observation that one-quarter of the cost of medical care could be eliminated by a better understanding of psychotherapy and its utilization by the medical profession. That alone should suffice to justify greater interest in psychiatry as well as the intangible benefits that accrue to patients through help in meeting emotional problems. We can also help balance the budget and reduce income taxes.

Every doctor practices psychiatry whether he is aware or not—some good, some bad, and some indifferent. It has now become a must for all physicians to improve their psychotherapeutic technique.

You can do pretty good psychiatry without a great deal of technical knowledge. You may not have good insight into what is called projection, identification, compensation or transference, but, if you are sincere, thoroughly honorable, kind and sympathetic and do not try to do too much, you will do more good psychiatry than a highly book-trained diplomate. You will give security—that's what so many of your anxiety patients need sorely. Follow this by reassurance and you will have helped a lot. There is where the good old family physician was more help to the community than the highly hospital-trained psychiatrist.

Until recently the training of medical students has been inadequate in the recognition of psychosomatic, personality and character disorders in patients; all of whom some time or another go to the physician for the relief of some vague symptoms which the hospital-trained physician can't explain by the usual routine test. The gulf between the young graduate's equipment and the old family doctor's horse sense and experience is pretty wide. The more recent recognition of the general practitioner is commended as no one is in a more key position.

You perhaps are one of those physicians who does not like to be bothered with nervous cases. Whether or not you like it, it is your duty to do something for them.

The need for psychiatric treatment in the office of the general practitioner (who sees 90 per cent of the cases first) is very, very important. You can help many patients more with a knowledge of emotions than with a stethoscope. The early treatment of every disorder has long been recognized as of the greatest value. The cost of care for the mentally ill has rapidly and steadily been rising to enormous proportions. The 60 million dollars that was recently voted in Michigan in a bond issue will soon have to be augmented. The stone, mortar and tiled halls will never solve the problem. The understanding of mental health needs must be at the onset.

The importance of every word and thought expressed by the physician in the presence of the patient is very important. Grover Cleveland once said that every word a president utters weighs a ton. A chance remark or phrase by the physician who is dealing with the patient who is nervous, tense and stressful often produces marked pathology. The patient with the tachycardia of functional origin, who is told time after time to come back in a week to have another check made, is soon incapacitated.

Even among the doctors of medicine and to a greater extent among the laity there is a lack of knowledge in the differentiation between a psychiatrist, a psychoanalyst and a psychologist. The psychiatrist is a doctor of medicine who has been well-trained by specific and regulated education and experience to treat the affective and organic disorders that result in symptoms of mental illness. The psychoanalyst has the same basic college training, but having, himself, been psychoanalyzed confines his therapy to the interpretation and treatment as originally promulgated by Sigmund Freud. The psychologist is not a doctor of medicine but has had special training regarding normal and abnormal behaviors. There is considerable discussion as to his right to administer psychotherapy.

The Council of the American Psychiatric Association has gone on record with the statement that "the practice of psychotherapy is a province of medical practice." The responsibility in the field of health lies with the physician.

A gross classification places mental illness in either the organic field or the field of affective disorders. The organic cases are more easily recognized by the general practitioner than the affective disorders, but are much less frequently met with in practice. This paper will deal largely with affective disorders. However, there is usually a psy-

chic component in every organic condition regardless of its location or type. For example, the woman with the lump in the breast must not be dismissed with the mere statement—we will take it out and you will be all right. She can easily develop many psychosomatic complaints and even a positive neurosis that can be avoided if the surgeon will take the time to consider and treat the person in the body, as well as the body. He can be a therapist of the emotions as well as an individual who cuts and sews.

In a brief, all-inclusive paper of this type, the material has to be made up largely of *Do's* and *Don'ts*. First, be absolutely certain of the absence of physical pathology. Nearly every symptom that can arise from physical pathology can be imitated almost identically by a psychiatric complaint. Hearing and vision disturbances of purely psychogenic origin are common. Hoarseness may be a neoplasm of the throat or an attention-seeking device. Gas, distress after eating are not necessarily signs of early malignancy but may be signs of unrequited love or other highly emotional factors. Low pelvic pain is frequently psychogenic and it may be very difficult to differentiate organic pathology from wishful thinking.

We find in spite of the above facts some doctors of medicine still are prejudiced against psychiatry. Some of this prejudice may lie in the physician himself. To be of psychiatric help, the physician must have an interest in people greater than his interest in wealth. The physician resorts to long laborious examinations and x-rays. Sometimes a minor organic disorder is made to carry the burden of the symptomatology and this is used as an escape for the physician who is reluctant to concern himself with the patient's emotional factors. Such things as dizziness, enuresis, frigidity, and impotence are passed off as something the patient will outgrow or he should buck up and forget it.

It behooves every doctor of medicine to make himself fully aware of psychiatric knowledge, yet the few who practice psychiatry and the rejection of psychiatry by a large number of their colleagues is pathetic. While the best minds in the profession accept psychiatry, there still remains an enormous number of doctors of medicine who only turn to psychiatry as a last resort.

An explanation of the attitude taken by our colleagues is that psychotherapy is not well understood. Colleges have not taught it. The college should teach as much about emotions as it does about drugs and bugs.

Again a word of warning. Organic pathology may be present. Only after the most painstaking examinations should one classify the patient as one needing psychiatric care only. But, if you cannot find an organic basis for the symptomatology, it should be considered malpractice if psychiatric therapy is not given. For generations, the public has been taught to depend upon drugs, surgery and manual therapy for the relief of human ills. Most patients have to be educated to the fact that they can have certain physical symptoms without known organic basis. Some patients just don't have the intelligence quotient to grasp it, but the majority, *if one takes the time,* will co-operate and receive benefit.

Such simple illustrations as grief brings tears without anything being wrong with the eyes; the lips get dry under tension; one does not feel like eating, if unhappy; and the old expression "he gives me a pain in the neck" will help the patient to understand his psychosomatic complaints. Above all, never ridicule a patient for symptoms that the laity often term as imagination. To tell the patient to go home and forget it is too common an expression, but a source of a great deal of revenue to the cultists. If there were nothing wrong with the patient, he would not be in your office.

In a practice such as we have in this day and age made up of different nationalities, sects, faiths and religious backgrounds, it behooves us to be cautious that we do not traumatize the patient or initiate new conflicts by statements or references in conflict with their particular faith or sect. This necessitates a little extra study on the part of the physician to learn something of the principles of the major groups. The patient's philosophy of life for his particular belief may be offended by the physician's lack of knowledge of his basic religious or racial training. For example, the Seventh Day Adventists, the Quakers, the Menonnites, the Catholics, the Vegetarians, must not be traumatized by orders or recommendations inconsistent with their fundamental faiths.

The patient does not readily accept the diagnosis that his complaints are due to something other than of a physical origin. He wants something he can tell his business associates that is acceptable. A woman does not like to tell her bridge club that her headache is due to her husband's infidelity. The golf player would rather explain a "missed

putt" on his arthritis than with his last encounter with the income tax man.

Every psychiatrist's files are full of patients who have gone for years from one doctor to another with their symptoms due to emotional maladjustments and frustrations, not recognized as such. On the other hand, patients often leave the psychiatrist's office and go where they can get a "shot" for undulant fever or a "shot" of an estrogenic substance for the "change!" Always remember that a person is sick or else he would not be in your office.

The physician's responsibility does not stop with the area of his specialty. Patients' emotional burdens are heaped on top of their physical ills—great or small. Successful treatment is impossible without recognition of this fact. Psychiatry cannot accomplish the impossible. "You cannot make a silk purse out of a sow's ear." You cannot improve conditions, but you can prevent progression and develop understanding.

Many of the problems that confront the doctor of medicine in general practice have very little relationship to the psychoses. I am referring here to Personality Pattern Disturbances. For example, inadequate personalities. They are not physically or mentally grossly deficient on examination, but they do show inadaptability, ineptness, poor judgment, lack of physical and emotional stamina and social incompatibility. There is not so much you can do with this group, but the real physician will make an attempt, at least, to help them in their dilemmas. Another personality trait disturbance is the emotionally unstable personality. He needs help in his poorly controlled hostility, guilt and anxiety reactions. To him, the good old family physician becomes the father type person and he needs a chance to talk to the doctor just as much, if not more, than some placebo pills. There are numerous personality disturbances and disorders that come into the physician's office that can be prevented from developing into severe character disorders or even so-called nervous breakdowns by tact and judgment on the part of the physician.

One of the patients that gives the doctor the so-called pain in the neck (now you know what I mean by a symptom arising from a disagreeable situation) is the patient who comes in, flops down on the chair and says, "Doctor, I'm all in." You have known the patient for a long time and are sure there is nothing physically wrong. The usual practice which the doctor has learned from radio advertising and other sources is to attribute it to a vitamin deficiency or "change of life." Manufacturers have become rich and not a few doctors have been able to take trips to Florida by the unwarranted use of vitamins and estrogenic therapy. When you are positive that there is no organic pathology, then try to recognize that feelings of fatigue and exhaustion can be due to the emotional "burning-up" resulting from frustrations, selfishness, disappointments or an inability to keep up with "The Joneses." Skillfully try to help the patient understand the probable cause—the "dynamic mechanism"—of his or her symptoms. Stimulate satisfaction in his everyday existence. Assure him that his physical condition is improved by reasonable activity, not forgetting, however, that fatigue often is the early symptom for tuberculosis, diabetes, anemia, brucellosis or some actual physical condition.

One of the most difficult nervous patients you have to treat is the one whose basic personality pattern makes for a poor adjustment reaction to life. The ones who can't take it—the ones extremely selfish—often the overprotected child in early life—they are very clever. They will simulate any symptom in order to get attention. If they cannot attain this by psychosomatic complaints, they will complain of mood-swings, they will complain of melancholia, and these are often very difficult to differentiate from true depressive states. However, their thought of futility and fixed patterns are helpful in the diagnosis of the true melancholia.

As general practitioners, you are frequently consulted as to the behavior of children. There has been a big change from the former philosophy—"children should be seen and not heard," "spare the rod and spoil the child" era to the present philosophy of the progressive schools. Whether or not one agrees fully with the present day concept of child training or feels that the pendulum has swung too far, nevertheless it is a physician's duty to make himself aware of good answers for the mother whose child will not eat his spinach or develop toilet habits as the mother wishes. Their behavior is often attention-seeking devices. Children love attention (as well as adults) and their behavior often is diagnosed as pure cussedness, which can be cured by proper attention. Some adults who come to your office are still children. They have grown older physically, but haven't grown up and matured emotionally. The too dif-

ficult problems should be referred to a mature child psychiatrist. The parents are not always to blame. Grandparents and siblings are dreadful hurdles to the young child and schoolmates are cruel. I believe that physical punishment has its place in discipline. When justly applied by a person who loves and respects the child and teaches that punishment should naturally follow misdeed, that we must learn to be responsible for the consequences of our acts, punishment is of value.

Very little will be said in this paper about sex. The author is inclined to think of sex deviations and sex maladjustments as being the results rather than the primary causes of illness. In other words, we have in the past had the cart before the horse and now we should consider the basic and fundamental disorders that lead to sex deviations. Don't tell your patient that he or she would be better, if he or she got married. Don't tell the immature young man that a house of prostitution will cure him.

Many patients who come into your office are filled with anxiety and feelings of fear. They complain of many different physical symptoms. Those with fear predominating are classed as suffering from a Phobic Syndrome. They have psychosomatic complaints that are due to feelings of insecurity because for the past twenty years we have been fed on a political poison emphasizing insecurity.

One of the most important sources of insecurity with its train of physical symptoms in the present day person is his lack of faith and religion. The human being needs faith and a deity. He must be able to depend upon some power greater than himself.

There are many subjects of interest to the general practitioner that time does not permit us to discuss. There is the problem of Court cases, of the mentally deficient child, of the epileptic, of the relatives of the mentally ill, and of the preparation of your patient before referring him to a psychiatrist.

In cases that have to be referred to the psychiatrist, the regular physician can do much to densitize the patient to what before World War I was considered more or less of a stigma—to visit a psychiatrist. Someone once gave a definition of psychiatry as: "Psychiatry is largely concerned with *well* individuals who are trying to meet successfully the stress, strains, tension and fears of everyday living." This is very helpful to the patient and does much towards establishing a good rapport between the patient and the psychiatrist. The psychiatrist, himself, can do much towards establishing a good rapport by his own attitude of being a physician rather than a mystical soothsayer.

The general practitioner has a serious problem in trying to anticipate which of his obstetrical cases is liable to develop what used to be called a postpartum psychosis. It is doubtful if anyone can anticipate all of these cases, but one can be more aware of certain types of personalities that are liable to break under stress and strain. There is a very, very limited number of these that fall in the category of toxic psychoses. A great many of them never become frankly psychotic, but the pregnancy and the care of the newborn often produces a train of unpleasant symptoms.

Another problem is the patient who comes to your office and later becomes a coroner's case by reason of self-destruction. Nothing is more frustrating or disconcerting to a physician than to have seen a patient several times and a little while later hear of a "rope in the attic" episode or "bridge accident." These patients are characterized by outstanding depression of mood, mental and motor retardation, perplexity, uneasiness and apprehension —they especially have ideas of futility, fear of poverty, and unforgivable feelings of guilt and even may admit there is nothing to live for. This is the patient that needs hospitalization and today can be treated very successfully. In general, after you have satisfied yourself of negative physical findings, think of the patient as a human individual, the product of his constitutional endowment and enviroment, who has his hopes and his fears, his worries and his problems, his wishes and his frustrations, his faith and his disbeliefs, his failures and his successes, and the physician can and should be able to help these.

In conclusion, if I have done anything to give you a better understanding of problems that have bothered you and if I have stimulated you to a greater total interest in the person who calls upon you as well as the body of that person, I shall have the feeling of having accomplished something worthwhile.

Methostan in the Treatment of Nutritional Dwarfism

Preliminary Report

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THE ANABOLIC effect of methylandrostenediol was used to good advantage in seven cases of nutritional dwarfism and an additional case of dwarfism from other causes. Stimulation of growth occurred in children who had been of less than average height and weight before treatment.

Nutritional dwarfism is perhaps the most subtle type of dwarfism encountered by the general practitioner. Children so dwarfed usually have good body proportions and are not deformed. However, they fall below normal in stature and weight. Their bodies, particularly the genitalia, are underdeveloped and they have poor muscle tone. Irritability, nervousness, and emotional instability are commonly found.

The first seven children treated with methylandrostenediol who are reported here were dwarfed from nutritional inadequacies. They came from homes with moderate incomes. There had been no serious disease or infection prior to treatment. As the appended tables show, most of them had been seen as infants. Their treatment with methylandrostenediol began when they were three or four years old. In all cases, x-rays of the wrist showed a delay in skeletal development. *Case 8* was not one of nutritional dwarfism and will be considered separately.

Methylandrostenediol was chosen for use in treatment because of its anabolic effects which are similar to those of testosterone and methyltestosterone. In contrast to them, however, it is unlikely to cause andromimetic effects.[1,2,3,4,5,7,8,9,10,11] An increase in weight may accompany the use of this steriod.[1,2,9,10] It has been reported effective for weight gain, increase in height, and stimulation of bone matrix formation.[1]

Methylandrostenediol was used in tablet form as Methostan.* The initial daily dosage usually was one-half tablet, 12.5 mg. However, no rigid dosage schedule was formulated as the dosage was adjusted according to the individual response. Each child returned one month after the first administration of the drug for evaluation of its effects. If only slight gains were apparent, the daily dosage was increased to three-fourths of a tablet, or approximately 18 mg. Sometimes the dosage was increased to one tablet, 25 mg., daily because it was desired to obtain the maximum growth possible prior to close of the epiphyses. Fusion of the epiphyses, it should be noted, was not an effect of the drug. The dosage of Methostan was purposely maintained at a low level because it was desired to stimulate growth processes. The drug usually was administered for two to four months and then stopped to determine if growth would continue unaided. From the experience gained, it is deemed wise to continue the drug until normal levels of weight and height are reached. Thereafter examination at three-month intervals for a year is advisable to assure that growth is progressing steadily.

The androgen, methyltestosterone, has been found to increase the growth rate in both poorly and well nourished dwarfs, notably by Talbot and his co-workers.[6] Accordingly, this substance was first administered to *Case 1* because she had been smaller than normal at birth and her weight and height had not reached the average for her age in the succeeding two years. Weight gain and increase in stature were achieved during the four months the patient received 10 mg. daily. However, methyltestosterone had to be discontinued because of the development of hirsutism and enlargement of the clitoris.

Methostan replaced the former drug after a rest period of two and a half months. The response to 12.5 mg. daily of Methostan in this patient illustrates that encountered in others. The child began to gain weight and her height increased. Irritability ceased rather dramatically, the youngster becoming happy and co-operative. Appetite improved markedly as did sleeping habits. Upon cessation of medication after two and a half months to determine whether the rate of growth could be maintained, body weight decreased and the patient reverted to her previous irritability and ate and slept poorly. Readministration after two months of the same dosage of Methostan again reversed all this.

Parents of the children receiving Methostan cooperated well as they could readily see results early in the treatment cycle. Children who had

*Manufactured by Schering Corporation, Bloomfield, New Jersey.

Case 1.—R. P., a girl, born October 1, 1948.

Age (yrs. mos.)	Weight (lbs. oz.)	Height (inches)	Head (inches)	Chest (inches)	Observations	Medication Daily Dosage	Side Effects
Birth	5 13						
— 3	10 4	22⅜	15¼	14¾	"Unhappy," eating and sleeping well, normal bowel movements		
1	17 10	27¾	17	16½	Extremely irritable, poor appetite		
1 6	20	29⅞	18½	17¾	„		
2 3	22 13	32⅜	19	18	Irritable, poor appetite, difficult sleeping habits, restlessness during sleeping periods		
2 7	22 13	33⅝	19	19		Methyl-testosterone 10 mg.	
2 8	24 2	33⅝	19	19		„	
2 9	25 7	34½			Improved emotional status with loss of irritability, improved sleeping habits	„	Hirsutism
3 1	28 2	36¼				Discontinued	Hirsutism, enlarged clitoris
3 3½	28 8	36¼			Irritability, loss of appetite, restlessness at night	Methostan 12.5 mg.	None
3 4½	29 11	37¼	19⅜	19¾	Markedly improved appetite, happy, co-operative	„	None
3 7	30 10	38	19⅜	19⅞		Discontinued	
3 9	29 9	38½	19½	19½	Poor appetite, whiny, irritable; poor sleep	Methostan 12.5 mg.	None
3 11	32 1	39⅜	19½	19½	Sleeping well, appetite good, happy; contented	„	None

presented problems in school, needed disciplining at home, and caused trouble in group play showed remarkable personality changes under treatment. The growth problem assumed secondary importance until these changes were wrought but thereafter the parents became interested in growth and were pleased with the increments obtained.

In *Case 2,* Methostan stimulated weight and height increases not obtainable with a controled diet and supportive vitamin therapy. Small gains in *Case 3* twice made it necessary to increase the dosage of Methostan to obtain a satisfactory rate of growth. The medication was administered nine months in all with a notable absence of hirsutism, voice changes, and masculinization. Treatment in *Case 4* began at age seven. With a high caloric, high protein diet and 18 mg. Methostan daily, this boy made good gains in weight and height. Treatment with Methostan was terminated in December, 1952, to see if satisfactory progress could be maintained without it.

No response to a high caloric diet, vitamins, and

Case 2.—C. S., a girl, born November 24, 1948.

Age (yrs. mos.)	Weight (lbs. oz.)	Height (inches)	Head (inches)	Chest (inches)	Observations	Medication Daily Dosage	Side Effects
Birth	5 7	?					
5 wks	7 13	20	14¼	13½	Excessively large anterior fontanel		
— 4	11 13	23⅝	16	16¼			
1 —	17 3	28⅜	17¼	17¾			
Examined at prolonged intervals					Poor appetite, emotional instability, irritability, restlessness at night	Vitamins, dietary control	
3 7	29 5	38½	19⅞	18¾	Irritable, uncooperative, constipation	Methostan 12.5 mg.	None
3 11	30 4	39⅞	20	19½	Co-operative, marked improvement in appetite and sleep, greater emotional stability, no constipation	"	"

Case 3.—C. W., a girl, born December 21, 1947.

Age (yrs. mos.)	Weight (lbs. oz.)	Height (inches)	Head (inches)	Chest (inches)	Observations	Medication Daily Dosage	Side Effects
Birth	6 1						
4 2	29 11	39⅝	18¼	19¾	Poorly nourished, irritable, wheezing, uncomfortable, unhappy child. Poor development.	Methostan, 12.5 mg.	None
4 3	31 2	39⅝	18½	20½	Improved appetite; increased sense of well-being	"	"
4 4	32 3	40	18½	21	Sleeping well. No irritability, agreeable, happy. Appetite still improving.	"	"
4 6	32 12	40¾	18¾	21¼	Appetite and sleeping habits good.	Methostan, 18 mg. dosage increased because of small gain	None
4 8	32 12	40¾	18¾	21¾	"	Methostan 25 mg.	"
4 10	33 14	41	19½	22	"	"	"
4 11	34 8	41⅛	19¾	21¾		Discontinued	

iron had been apparent in the sixth child for a year prior to treatment with Methostan. Upon receiving the drug, he improved and started eating a well balanced diet and drinking milk. There was marked improvement in his well-being. He enjoyed playing outdoors, which he had not enjoyed before. He became co-operative both at home and on his visits to the office.

Case 4.—J. R., a boy, born March 13, 1945.

Age (yrs. mos.)	Weight (lbs. oz.)	Height (inches)	Head (inches)	Chest (inches)	Observations	Medication Daily Dosage	Side Effects
Birth	6 3				Good condition		
2 6	25 12	33⅝	19	19½	Poor appetite, sleeping well, bowel habits regular, irritable, unco-operative		
Examined at intervals for minor upper respiratory infections							
5 4	37 5	41¼	19⅞	22¼	"		
7	42 6	43½	20	23½	Undernourished, poor appetite, good sleeping and bowel habits, irritable, wrangling in school, generally underdeveloped stature	Methostan 12.5 mg.	None
7 1	40 13½	43½	20⅛	23½	Improved appetite, and temperament, better relationships in school	Methostan 18 mg. High calorie, high protein diet	"
7 3	42 5	43½	20⅛	23¾	Appetite increased, temperament improved, co-operative	"	None
7 4	43 4	44⅜	20⅛	23¾		Discontinued	
7 6	43 11	45¼	20⅛	24¼	Irritable, unco-operative, discomfort in school. poorer appetite.	Methostan 18 mg.	None
7 7	44 13	46	20⅛	24¾	Good appetite, no irritability, co-operative, well-balanced child	"	"
7 9	46 10	46½	20⅛	24½		Discontinued	

The last patient, *Case 8,* is perhaps the most interesting of the group but this was not a case of nutritional dwarfism. This girl was first seen on August 30, 1950. Although she was sixteen years of age, her stature was that of a six-year-old child. Her previous treatment and condition at the time of examination are given in the table, *Case 8.* She had grown only one-half inch in the previous two years. In the first fifteen days of daily administration of 10 mg. methyltestosterone, a weight gain of 2 pounds 2 ounces and height increase of ⅜-inch occurred. The patient had been unco-operative and difficult to handle on the first visit, but her emotional status so improved under therapy that a close bond of friendship began to develop.

Some early fusion of epiphyses became apparent on x-ray examination after five months of treatment. The dosage of methyltestosterone was therefore increased to obtain all possible growth before complete fusion occurred. During the ensuing three months some slight increase in breast tissue, some growth of pubic hair, and slight enlargement of the clitoris became apparent. Voice changes also began to develop that necessitated discontinuance of methyltestosterone. The limit of treatment had been reached and any increase in the androgen would have given prohibitive virilization.

Without methyltestosterone, the patient's height at first increased slightly and then ceased to change. Her weight declined. Nervousness,

Case 5.—B. M., a boy, born June 4, 1948.

Age (yrs. mos.)	Weight (lbs. oz.)	Height (inches)	Head (inches)	Chest (inches)	Observations	Medication Daily Dosage	Side Effects
Birth	3 5				2½ months premature		
— 10	14 2	24⅝	16½	17½	Poor condition, nutrition, and posture. Skin pale, clammy, warm. No teeth. Not sitting alone. Fontanel large anteriorly, protuberant abdomen, chronic respiratory infection. Appetite good but vomiting following ingestion of strained foods. Sleeping habits poor.		
— 11	17 5	25⅝	17¼	18¼	Reacting well to environment, sitting alone, three teeth erupted		
1 4	21	29½	18	19			
1 11	22 8	31⅛	18¼	19¾	Poor appetite, restless sleep		
3 10	29 4	36⅞	19	21	Irritable, restless sleep, poor appetite		
3 11	29 6	37	19	21	Poor appetite and sleep, bowel movement irregular, frequent upper respiratory infections	Methostan 12.5 mg.	
4 1	30 6	38⅛	19	21½	Marked improvement in appetite and temperament	Parents failed to administer Methostan in the succeeding month	
4 2	30 4	38⅛	19	21½		Methostan 12.5 mg.	None
4 4	31 6	38¾	18½	21¾		"	"
4 5	32 7	38¾	18¾	22		Methostan 18 mg.	"

irritability, and lack of co-operation returned. These symptoms disappeared under treatment with Methostan. After an initial fall in weight, she began to make a steady gain that continued throughout the reported period of observation. The dosage of Methostan was first increased to 18 mg. and later to 25 mg. despite nearly complete fusion of the long bones, apparent on x-ray, inasmuch as growth continued and it was desired to achieve the maximum possible. Methostan was continued for a year. At the end of that time, on December 17, 1952, the patient's weight was 65 pounds, her height 50⅝ inches. There had been no adverse effects from the medication.

Therapy with Progynon had been instituted when the patient was seventeen years old as it was desired to develop the secondary sex characteristics. Under this treatment the patient's voice softened, breast tissue increased, and female adipose deposits appeared. Regular seven-day menses had occurred during the three months preceding the last examination. The secondary

Case 6.—T. L. W., a boy, born October 12, 1948.

Age (yrs. mos.)	Weight (lbs. oz.)	Height (inches)	Head (inches)	Chest (inches)	Observations	Medication Daily Dosage	Side Effects
Birth	5 10						
— 4	11 3	23 7/8	15 1/4	15 3/4	Poor appetite, repeated diarrhea, sleeping well, irritable, physical examination normal findings except for poor nutrition	High calorie diet with vitamins and iron	
— 6	12 1	25 3/8	15 5/8	15 3/4		"	
— 6 1/2	12 12	25 3/4	16	16		"	
1	15 14	28 1/2	17	17 1/4		"	
3 11	23 7	36	18 1/4	19 3/4	Poor appetite , good sleeping and bowel habits	Methostan 12.5 mg.	None
4	24 12	36 5/8	18 1/4	19 3/4		"	"
4 1	25 9	36 3/4	18 1/8	20 1/4	Eating well-balanced diet, marked improvement in well-being, enjoys outdoor play, co-operative	"	None

Case 7.—C. M., a girl, born March 26, 1948.

Age (yrs. mos.)	Weight (lbs. oz.)	Height (inches)	Head (inches)	Chest (inches)	Observations	Medication Daily Dosage	Side Effects
Birth	7 6						
5 weeks	9 9	21 1/2	14 1/2	15	Colic, constipation, vomiting, restlessness		
— 6 1/2	15 4	26 1/2					
1 —	19 4 1/2	28 1/4					
4 —	28 11	37 3/8	19	20 3/4	Poor appetite and sleep, restless, irritable, uncooperative, no play with children	Methostan 12.5 mg.	None
4 1	28 13	38	19	21 1/4	Had bad chickenpox in preceding month	"	None
4 3	31 4	38 1/2			Appetite markedly increased, less irritable, playing well	Discontinued	
4 5	32 10 1/2	38 3/4			Appetite slackening, not as alert and happy as previously	Methostan 12.5 mg.	None
4 7	32 8	39 1/2				"	"
4 9	32 7	40 1/4	19 1/8	20 1/8		Discontinued	

Case 8.—A girl, born August 5, 1934.

Age (yrs. mos.)	Weight (lbs. oz.)	Height (inches)	Head (inches)	Chest (inches)	Observations	Medication Daily Dosage	Side Effects
Birth	4 5						
1 —	12						
2-3						Thyroid	Excessive nervousness, increased pulse rate
7-14					Basal metabolism at 14, +23; 2 months later, normal	Thyroid 1 gr.	
16 (first seen)	52 10	47¾	19⅞	24	Pulse 120, abdomen 20¼", good general condition, good nutrition, secondary sex characteristics absent, emotional status poor, unco-operative	Methyl-testosterone 10 mg.	
16 1	54 12	48⅛			Eating and sleeping well	"	
16 2	56 8	48⅜				"	
16 3	57 12	48⅝			Marked improvement in emotional status and co-operation		
16 5	58 11	48⅝			X-rays of wrist showing early fusion	Methyl-testosterone 15 mg.	
16 6	59 10	48⅞			Slight increase in breast tissue, some pubic hair and enlargement of clitoris	Methyl-testosterone 15 mg.	
16 8						Discontinued	Voice changes
16 9	64 6	49¼					
16 10	63 14	49¾					Voice changes persisting
17	63 14	50½				Progynon 2 mg. 3 times weekly	
17 3	63 14	50½			Nervous, irritable, unco-operative. Pulse 140. Appetite and physical condition good		
17 4	62 3	50½			BMR—14, pulse, 120	Progynon 2 mg. 3 times weekly, Methostan 12.5 mg.	
17 5	Decreased	50½			Co-operative. Feeling well.	Progynon 2 mg. 3 times weekly Methostan 18 mg.	

Case 8.—(Continued)

17	6	61	14	50⅜	19½	26	X-rays of wrist showing nearly complete fusion	"
17	9	64	9	50⅞			Female adipose deposits, increased breast tissue	Progynon 2 mg. 3 times weekly, Methostan 25 mg.
17	11	63	2	50⅞	19⅜	25⅜		"
18	1	65	8	51	19½	26¾		"
18	4	65		50⅝	19½	27	Seven-day menses for past 3 months, secondary sex characteristics developing, voice softened, no enlargement of clitoris	Progynon-B 1 mg. three times weekly during first half of cycle. Methostan discontinued

sex characteristics continue to develop on a dosage of 1 mg. Progynon-B intermuscularly three times weekly during the first half of the menstrual cycle. This patient is far from normal in physique and secondary sex characteristics but the case illustrates what can and should be accomplished with a drug like Methostan. It also points up the fact that it should be administered prior to fusion of the epiphyses. Almost certainly, this child's height and weight could have been brought within normal limits had she been seen at an earlier age.

Summary

In seven cases of nutritional dwarfism, Methostan through its anabolic effect stimulated growth, the children gaining in weight and height. Their emotional status improved, sometimes dramatically. One additional dwarf whose nutrition had been adequate, increased in stature and gained weight when treated with Methostan. This patient was not seen early enough before the beginning of fusion of the epiphyses to achieve normal stature. Had she been, it is thought Methostan might have stimulated growth to normal size.

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Hyperthyroidism

The Rationale of Modern Treatment

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THE HIGH incidence of goiter in the Great Lakes goiter belt has been greatly reduced during the past twenty years, due undoubtedly to the increased iodine content of our food and salt. The work of Marine and Kimball[6] during the early part of this century led the way to our progress in the control of thyroid disease. Hyperthyroidism has likewise decreased proportionately. In my experience and that of my associates, 1,743 patients were treated surgically for hyperthyroidism during the period 1920 to 1930; 1,331 from 1930 to 1940, while only 884 were operated upon during the past decade, 1940 to 1950, for the same disease. However, hyperthyroidism is still sufficiently common to warrant our constant interest and research.

Since the important contributions to the treatment of hyperthyroidism in 1923 by Plummer,[8] management of toxic goiter has followed until recently, rather clearly defined procedures. The accepted and highly successful therapy consisted in iodinization of the patient and subtotal resection of the thyroid gland. With the introduction of antithyroid substances by Astwood[1] nine years ago and radio-active iodine isotopes by Hertz, Roberts and Evans[5] in 1938, interest in the etiology of hyperthyroidism and its treatment has been revived and greatly stimulated.

With three available methods of treatment for thyroid disease, all of which are now well established as sound and effective procedures, it seems wise to look into their mode of attack in order that the proper therapy may be intelligently selected in a given case.

At the outset, it is important to appreciate that the ultimate cause of hyperthyroidism is not known. We do know, however, that the anterior pituitary gland, through its thyroid stimulating hormone thyrotropin, is capable of producing the symptoms of hyperthyroidism as:

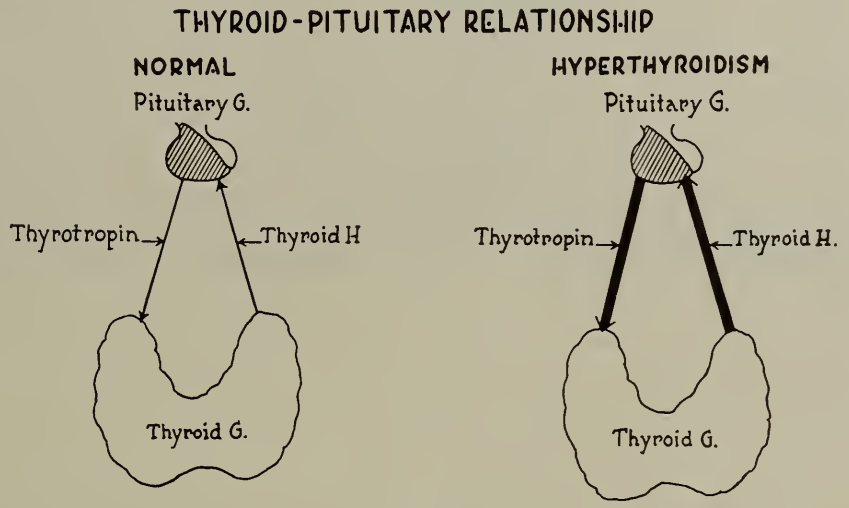


Fig. 1.

1. Hypertrophy and hyperplasia of the thyroid.
2. Loss of colloid.
3. Elevation of basal metabolic rate.
4. Disturbances of carbohydrate metabolism.
5. Disturbances in calcium and protein balance.
6. Signs and symptoms of hyperthyroidism.

These essentially are the findings in hyperthyroidism. It appears, therefore, that the pituitary or a pituitary stimulating organ as the hypothalmos is primarily responsible for the disease (Fig. 1).

Heinbecker[4] recently showed that the glandular hypophysis can be changed through altered activity of the hypothalmic nuclei which control the secretion of the neural hypophysis. This affords a basis for a concept of the pathogenesis of hyperthyroidism.

While it is important to keep in mind the possible basic causes for hyperthyroidism, we have

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been unsuccessful in dealing with them through any effective therapeutic measure yet devised. We are still compelled to control the disease by inhibiting the thyroid effect. This has been achieved by the three methods named above.

the thyrotropic activity. Secondly, an important observation has been made by Wolff and Chaikoff[10] working with istopes in which they found that thyroid synthesis of inorganic iodine to thyroxin is inhibited when the amount of inorganic

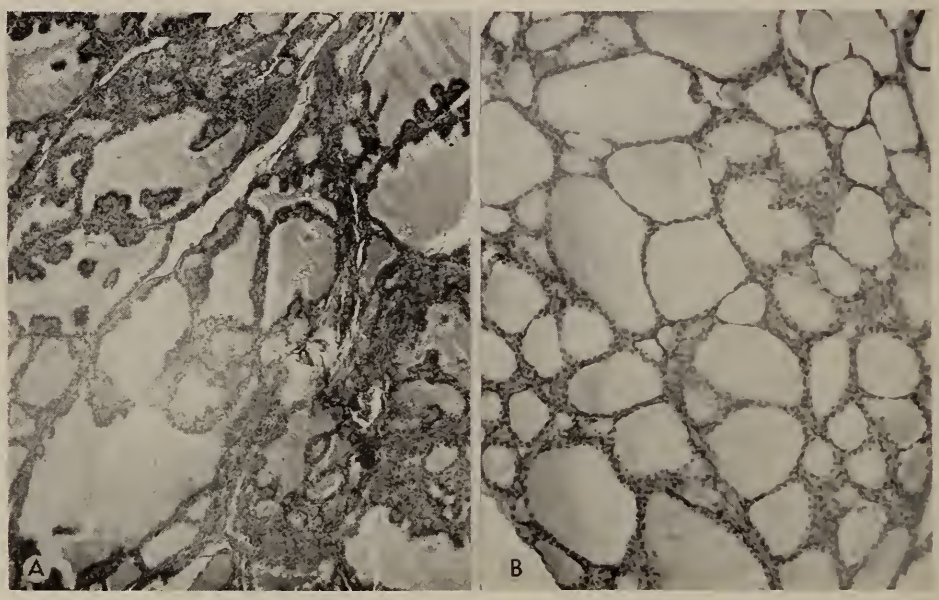


Fig. 2. Microphotographs of sections of the thyroid gland in diffuse toxic goiter (Grave's disease) Courtesy C. V. Weller, M.D., Chairman Department of Pathology, University of Michigan.
(A) Hypertrophy, hyperplasia and loss of colloid before treatment.
(B) Remission and involution after treatment with iodine.

Iodine.—Before Plummer introduced iodine as an important agent in preparing the toxic thyroid for surgical removal, thyroidectomy was a hazardous procedure, often carried out in many stages and resulting in an unduly high mortality. With the use of large doses of iodine in hyperthyroidism, involutionary changes in the affected gland promptly took place (Fig. 2). Exhausted acini became filled with colloid, and columnar or cuboidal follicular cells became flattened. Microscopically, the gland appeared not unlike the normal. With these changes, a typical clinical remission occurred as might be expected.

How then does the mere addition of excess iodine to the patient's intake bring this about? Here again the favorable reaction of the drug is not entirely clear. The following observations explain to a degree, however, what takes place (Fig. 3). First, iodine has a depressing effect upon the ability of the thyrotropic hormone to produce toxic goiter, which increases the involutionary effect on the hyperplastic gland. Experimentally, addition of free iodine to pituitary extract results in the loss of 90 to 100 per cent of iodine in the serum exceeds 35 mcg per cent. This may explain in part the reduction of thyroid hormone secretion in the iodinized patient with hyperthyroidism.

Because of these involuting effects of iodine on the toxic thyroid, it is not difficult to understand that thyroidectomy becomes a relatively safe procedure when the patient is well iodinized. Add to these therapeutic measures the proper use of fluids, carbohydrates, oxygen and cardiac therapy, and the procedure carries a mortality of only about 1 per cent in all cases. Furthermore, if patients prepared for thyroidectomy with iodine alone are carefully selected and those in advanced stages of hyperthyroidism, or with severe complications, are dealt with by other available methods, the mortality is almost negligible.

Thyroidectomy with iodinization, therefore, has in its favor (1) a rapid and safe method in dealing with hyperthyroidism; (2) excellent results in 90 per cent of cases; and (3) the additional advantages of thyroid removal in the event of carcinomatous change.

On the other hand, we have the disadvantages

of (1) an irreversible process, and (2) an operative procedure which carries with it a low per cent of complications such as tetany, recurrent laryngeal nerve injuries and recurrence of toxic goiter in 2 per cent to 5 per cent of all cases. Recurrence is considerably more common in diffuse toxic goiter than in toxic nodular goiter. Crile and McCullagh[2] believe that with careful follow-up, recurrence in the Grave's disease type of hyperthyroidism will be found to be about 15 per cent.

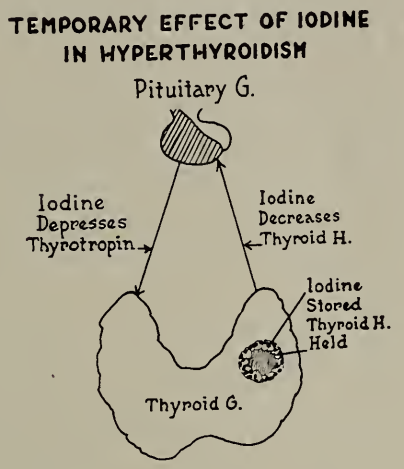


Fig. 3.

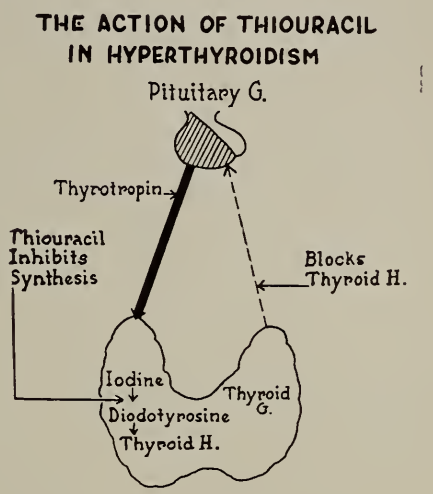


Fig. 4.

Antithyroid Drugs.—Most recent advances in the therapy of hyperthyroidism have been brought about through the use of thiouracils. To attempt to cure toxic goiter with goiterogenic substances is indeed paradoxical, though curiously enough very effective.

In 1943, Astwood and his associates put to clinical use the observations of the MacKenzies and MacCollum that certain sulphur containing goitrogens produced hyperlasia with diminution of the basal metabolic rate in animals. They noted further that the effect was neutralized by thyroxin and unaffected by iodine. It was thought, therefore, that hyperplasia resulted from increased pituitary activity due to the lack of the inhibiting effect of thyroxin.

Soon after the introduction of thiouracil as an antithyroid agent, it became recognized as a dangerous drug because of the high incidence of agranulocytosis which appeared suddenly and was entirely unpredictable. Fortunately after a study of a large number of compounds which possessed antithyroid activity, prophylthiouracil was introduced by Astwood, which is many times more effective and enjoys a low incidence of serious side reactions. Agranulocytosis does occur, but the incidence is probably less than 0.1 per cent.

In Europe, methylthiouracil was introduced and is now being used extensively in this country. Five years ago Stanley and Astwood[9] introduced Tapazole (1-methyl-2-mercaptoimidazole) which is many times more effective than propylthiouracil. Favorable reports on its use are constantly appearing in the literature. Unfortunately these drugs do not strike at the basic etiological factor responsible for hyperthyroidism, but they constitute an important step forward in the control of the disease.

By means of radioactive iodine studies, their action has become rather clearly understood. It is now the generally accepted belief that thiouracil inhibits the synthesis of inorganic iodine into diiodotyrosine, and therefore prevents the formation of thyroxin as is indicated in Fig. 4. Normally by means of autoradiography and biochemical studies, the trapping and rapid concentration in the thyroid gland of inorganic radio-active iodine may be demonstrated. Immediate synthesis into organic thyroxin takes place, and within forty-eight hours 90 per cent of the collected inorganic iodine is stored as organic iodine. Excess inorganic iodine, which cannot be utilized after twenty-four hours, passes out of the gland into the general circulation. If, on the other hand synthesis is blocked with thiouracil, the trapping of inorganic iodine continues, but it enters and leaves the gland in a curve similar to that of the iodine content in the plasma. These observations indicate that thiouracil acts by blocking the synthesis of inorganic to

organic iodine. Depending, therefore, upon the amount of stored organic iodine in the gland, a reduction in the available thyroid hormone takes place. The depressant effect of thyroid hormone on the pituitary is lost, and the production of thyrotropic hormone is increased, resulting in thyroid hyperplasia. If thiouracil is stopped, there again will be rapid uptake of iodine and involutionary processes take place.

With the reduction of the thyroid hormone which is responsible for the clinical picture in hyperthyroidism, the disease passes into a remission which may be controlled indefinitely by the drug.

Extensive reported experience with propylthiouracil permits the following conclusions to date:

1. The dosage varies from 300 to 600 mg daily depending upon the patient's response.
2. Agranulocytosis is rare but must be kept in mind.
3. Pre-treatment of the patient with iodine increases the amount of stored iodine and therefore delays the effect of the drug.
4. Toxic nodular goiters which contain considerable stored iodine do not respond as rapidly as diffuse toxic or Grave's disease types.
5. Forty to 50 per cent of permanent remissions may be expected after prolonged treatment, varying from six months to two years.

Under conservative treatment, the drug should be tapered off after the patient has become euthyroid rather than stopped abruptly. Recurrence is more likely otherwise. It is interesting that the remission rate is considerably higher in Grave's disease than in toxic nodular goiter as we recently point out by E. P. McCullagh.[7]

Propylthiouracil is ideal for surgical preparation as it converts most cases of toxic to nontoxic goiter. This has reduced surgical mortality in competent hands to about 0.1 per cent. It is desirable to discontinue the drug and iodinize the patient two weeks before the operation to restore the colloid in the gland, and reduce the friability and vascularity. Whether prolonged use of the drug will demonstrate any carcinogenic effect has not yet been determined, but it is doubtful.

The chief disadvantages in the use of propylthiouracil in the treatment of hyperthyroidism consist in the prolonged care which patients require and failure to reduce the size of large unsightly goiters, or those causing pressure symptoms. Furthermore about 10 per cent of patients develop some type of side effects or intolerance for the drug. Finally, antithyroid substances do not remove the cause of the disease.

Radio-Active Isotopes.—Now we come to the most hopeful method of hyperplastic thyroid control yet devised, namely: radio-active iodine therapy.

As you know, radio-active iodine was introduced by Fermi in 1934. Four years later Hertz, Roberts and Evans,[5] of Boston, and Hamilton and his co-workers[3] in California published their findings in the study of thyroid physiology by means of tracer doses of radio-active iodine and autoradiographs.

This work disclosed certain important facts which have to do with isotope therapy. About 90 per cent of trapped iodine was found to be synthesized and held in organic form in the colloid; 10 per cent remained as inorganic iodine. Radio-active iodine appeared in the follicular cells within thirty minutes after administration, and in twenty-four hours none remained. It is thought, therefore, that the cells convert inorganic to organic forms which remain stored in the colloid. Furthermore, experience with I^{131} showed as might be expected, that the uptake of tracer I^{131} is much more rapid in hyperplastic goiters (75 to 95 per cent) than in the normal (65 per cent). In nodular toxic goiters, the uptake varies greatly, depending upon the degree of hyperthyroidism. In those nodules with hyperplasia, most of the tracer I^{131} will be found. This selective action is of great value in the treatment of toxic nodular goiters since the offending nodules are destroyed with relatively little damage to the normal gland.

We have, therefore, a new therapeutic agent which may be directed specifically against the hyperplastic thyroid without danger to other body tissues. At the present time I^{131} which is prepared by the Oak Ridge National Laboratories and released under certain controls, is used. Its half-life is only eight days, which means that at the end of thirty days, most of its radio activity is spent. The rays (largely Beta rays) penetrate tissue only 1 to 2 mm. and therefore are innocuous to surrounding tissues in the region of the thyroid gland where the highest concentration exists. Under treatment, hyperplastic portions of the gland are destroyed and reduced in size, and a remission of the symptoms occurs. Most glands with diffuse toxic goiter will be reduced to about normal size.

but this is not true of the nodular type. Dosage varies from 3 to 17 mc. depending upon distribution of the hyperplasia. In diffuse hyperthyroidism of the Grave's disease type, response is rapid and smaller total doses are required than in the nodular types as might be anticipated. Repeated doses may be required in the nodular types.

The advantages in radio-iodine therapy are obvious. The method is simple and safe in qualified hands. There is no discomfort to the patient, and no complications involving the parathyroids or the recurrent laryngeal nerves. Myxedema in diffuse hyperthyroidism is no more frequent than after adequate surgery. In most cases of diffuse hyperthyroidism, the gland is reduced to normal size, resulting in a satisfactory cosmetic effect. To deliver by x-ray therapy, radiation equivalent to that of the isotope would cause severe damage to the skin and deep tissues of the neck, and would be less effective.

The disadvantages consist in the possible carcinogenic effect, which has not yet been determined. Therefore, I^{131} should be limited to older patients, and bad risk patients at any age.

In toxic nodular goiter, there is little reduction in size and the required dose of the isotope is larger than may be entirely safe. Furthermore, the possibility of a malignant nodule, though rare in toxic goiter, may be overlooked. Finally, the istope is not safe in pregnancy after two months because of damage to the fetal thyroid.

In 1949, an Isotope Laboratory was established at Marquette University Medical School under the direction of Dr. Irving I. Cowan, Assistant Professor of Radiology. Since then 282 patients with hyperthyroidism were treated with excellent results in 90 per cent. These have been carefully followed to date, but there has not been sufficient time to accurately evaluate I^{131} as a therapeutic agent in this disease. As there is some divergence of opinion in the literature, I have concerned myself with thirty-six private patients, personally observed over a two-year period. Because of the remote danger of a carcinogenic effect, treatment was limited to recurrent hyperthyroidism in patients past fifty years of age, and to extremely bad risks of the Grave's disease type at any age in which the operative risk might well outweigh that of cancer. The youngest patient was twenty-two years old with severe diffuse hyperthyroidism (BMR plus 100) which failed to respond satisfactorily to antithyroid drugs and iodine over a period of a year. The oldest, with recurrent hyperthyroidism, was sixty-eight years of age.

The basal metabolism varied from plus 20 to plus 100, with an average of about plus 45. The patients with low basal metabolic rate were selected because they were in the older age group with recurrent hyperthyroidism, and in some instances there was paralysis of one recurrent laryngeal nerve. All of the patients showed an uptake of tracer doses of I^{131} well above normal.

The dose varied from 3 mc. to 17 mc. Nearly half of the patients, and this included chiefly the recurrent group, were controlled with 3 to 7 mc. Eighty per cent were made euthyroid with doses of 10 mc. or less.

There were two clinical failures, though the basal metabolism rate and tracer doses indicated normal thyroid activity after treatment. Two other patients enjoyed only fair clinical results. The remaining patients, approximately 90 per cent, had excellent results.

In all cases, the basal metabolism rate had returned to normal and tracer doses of I^{131} confirmed these findings. On the basis of these tests, there were no hypothyroid glands, yet for several months after treatment many of the patients complained of tiring easily and showed fatigue on moderate exertion. Some complained of nervousness and emotional disturbances. There was occasional swelling of the feet and eyelids not due to associated cardiorenal disease. Small doses of thyroid gland brought about prompt improvement which seemed to indicate that there was subnormal thyroid activity. It is difficult to appraise the result of this group of patients accurately as there were many complicating diseases as hypertension, arteriosclerosis, cardiac disease, arthritis, diabetes, nervous instability, et cetera. Nevertheless the hyperthyroidism was completely controlled in all cases, and in 90 per cent, the clinical improvement was good.

Summary and Conclusion

A brief résumé of the three presently accepted methods of treatment for hyperthyroidism has been presented. It is important to look into their mode of attack and their limitations in order that the proper procedures may be intelligently selected in a given case.

Iodinization with subtotal thyroidectomy is a rapid and safe method of dealing with hyper-

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Intestinal Obstruction 1900 vs 1952

By Meyer O. Cantor, M.D., and
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THE MORTALITY rate of acute intestinal obstruction has been reduced from 50 per cent to approximately 15 per cent in the past fifty years. Many factors have been responsible for this. Among these is our better understanding of fluid balance, use of antibiotics, and intestinal decompression. These things, well known to all interns, were unknown in 1900. The fact that the mortality rate for acute intestinal obstruction still remains 15 per cent would suggest that something was lacking in the management of this disorder.

Gibson,[3] in 1900, reviewed 1,000 operations for acute intestinal obstruction. From this study certain points can be noted. The over-all mortality rate was 47 per cent whereas the mortality rate for patients over fifty years of age was 56 per cent. In comparing these findings with a review of 425 patients treated for acute small bowel obstruction at Grace Hospital between the years of 1945-1950 a marked improvement was noted. The over-all mortality rate for the 425 patients treated between the years of 1945-1950 was 15.7 per cent. Almost one-fourth of all patients were over the age of sixty. In this age group the mortality rate was found to be 24 per cent. A sufficient number of younger individuals died so that the average age at the time of death was fifty-six years. The fact that our life expectancy has increased has resulted in more individuals in the older age groups being alive to develop intestinal obstruction.

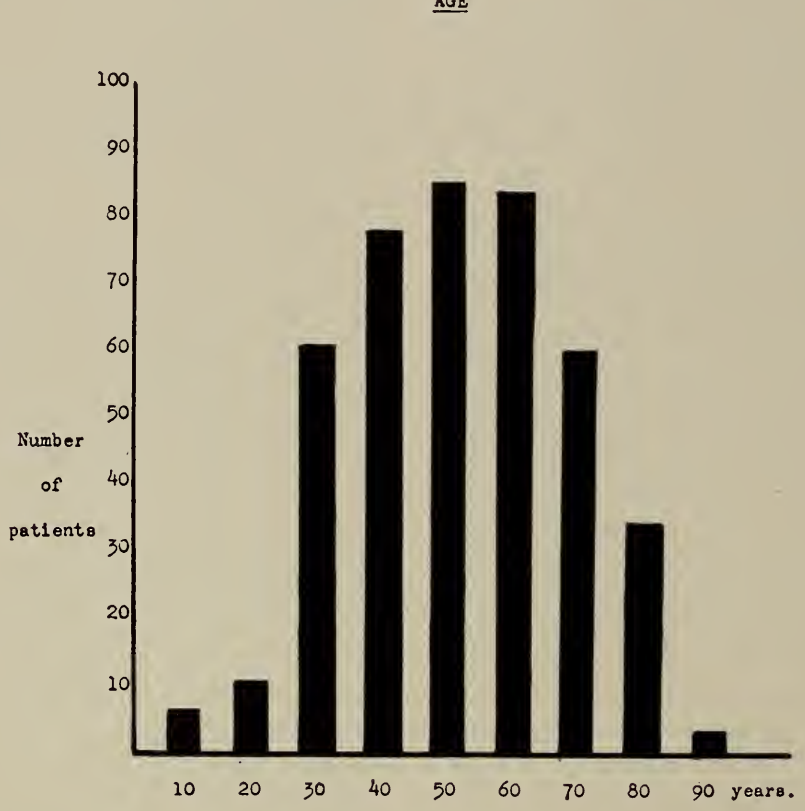


Fig. 1.

There has been a complete change in the numbers of individuals in each sex with this disorder. In 1900, 54 per cent of all patients were males and only 46 per cent of all patients were females. A ratio of males to females of 1:1 can be calculated. In 1950, 69 per cent of all patients treated for intestinal obstruction were females and only 31 per cent were males. This is a ratio of females over males of 2:1.

The etiological factors responsible for acute small bowel obstruction has shown a decided change in this fifty-year period. In the material

presented by Gibson during the ten-year period of 1888-1898 the following etiological factors were reported:

(a) hernia	354	(35 per cent)
(b) intussusception	187	(18.7 per cent)
(c) bands	186	(18.6 per cent)
(d) volvulus	121	(12 per cent)
(e) Meckel's diverticulum	42	(4 per cent)
(f) gall stones	40	(4 per cent)
(g) openings	34	(4 per cent)
(h) foreign bodies	16	(1.6 per cent)
(i) miscellaneous	20	(2 per cent)

In the miscellaneous group were placed all those patients presenting a disorder responsible for less than five cases each.

In comparing these two tables of etiological factors, certain differences are obvious. It will be noted that adhesive bands were responsible for the greatest number of obstructions in our series of cases (56 per cent) whereas in 1900 only 18.6 per cent of all cases were obstructed because of adhesions. The greatest number of these adhesive bands were acquired as a result of previous surgery. Figure 2 summarizes the type of previous surgery

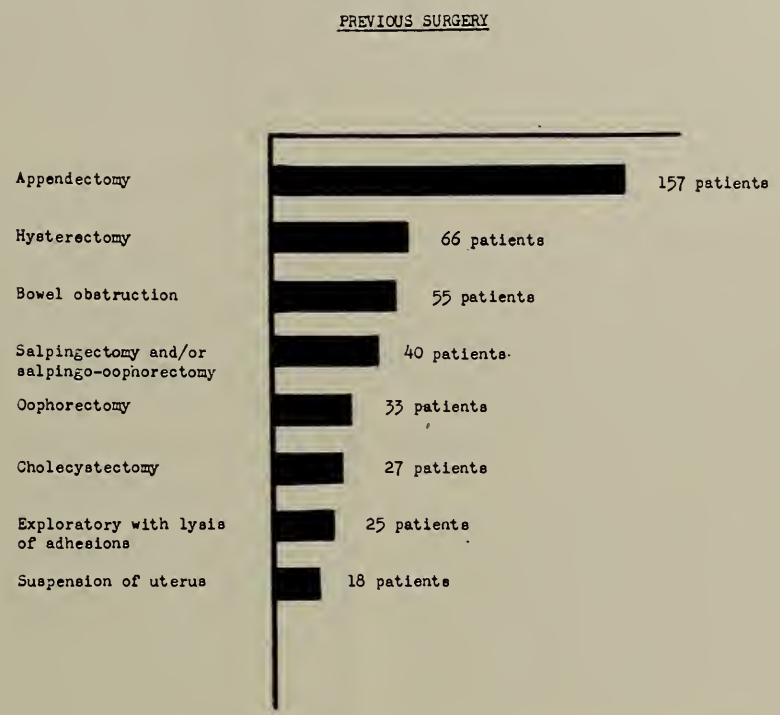


Fig. 2. Surgical procedure numbering ten cases or less: (a) resection of colon, (b) duodenal diverticulectomy, (c) ectopic pregnancy, (d) caesarean section, (e) plication of utero-sacral ligaments, (f) d and c with perforation of uterus, (g) gastroenterostomy, (h) small bowel resection, (i) intussusception, (j) surgery of the bladder, (k) caecostomy, (l) closure of perforated ulcer, (m) ileocolostomy, (n) Meckel's diverticulectomy, (o) ruptured viscus, (p) Noble's plication.

The etiological factors responsible for the acute small bowel obstruction in the series of 425 patients treated at Grace Hospital fifty years later is as follows:

(a) adhesions	240	(56 per cent)
(b) hernia	33	(7.7 per cent)
(c) carcinoma	8	(1.9 per cent)
(d) volvulus	11	(2.5 per cent)
(e) abdominal abscess	12	(2.8 per cent)
(f) gall stones	7	(1.6 per cent)
(g) undetermined	26	(8 per cent)
(h) miscellaneous	88	(20 per cent)

that these patients had performed. The number of congenital bands causing acute small bowel obstruction was very small. A reduction in the number of patients with intestinal adhesions would do much to further reduce the numbers of such patients obstructed. This would in turn reduce the mortality rate for acute small bowel obstruction. Many methods have been proposed for accomplishing this.[2,4,5] Despite all these proposed methods of adhesion prevention, we suspect that the greatest single factor will continue to be the gentleness with which tissues within the abdo-

men are handled, adequate peritonealization, and the avoidance of surgical intra-abdominal procedures unless definitely indicated. Any further reduction in mortality rate for this group of patients must be directed along these lines.

Hernia ranked second (7.7 per cent) as a causative factor in the production of small bowel obstruction in our series but ranked first in Gibson's series with an incidence of 35 per cent. This great reduction in the number of obstructed hernias is undoubtedly due to the high percentage of hernias repaired. Industrial surgeons and industry, which insists upon a physical examination before hiring labor, has resulted in great numbers of hernias being diagnosed early. Since most industries will not hire anyone with a hernia, these were repaired. Economic pressure often results in a hernial repair in many cases in which this otherwise might not be done.

Intussusception was responsible for the second largest number of cases obstructed in Gibson's series whereas less than five such cases appeared in our series. Intussusception was therefore classified in the miscellaneous group in our series. It is difficult to understand why the incidence of intussusception was so high in 1900 and so low in 1950.

Volvulus appeared to be five times as common in 1900 as compared with 1950. Dietary improvements probably play a part in the reduction in the number of such cases. This is suggested by the fact that in those countries such as India in which the diet is very meager that the incidence of volvulus is much higher than in our country.

Meckel's diverticula were found in 4 per cent of all cases operated upon in 1900 as compared with less than five cases in 1950. The only explanation for this must lie in the difference in the types of patients treated. One would not expect that there should be any difference in this type of case.

Gall stones were the cause of acute small bowel obstruction in 4 per cent of all cases in 1900 but only 1.6 per cent in 1950. Here again, cholecystectomy for the removal of gall stones has undoubtedly been responsible for reducing the number of patients obstructed from this cause. Cholecystectomy for gall stones at present is a routine and safe operative procedure. In 1900 it was a rather formidable procedure with an appreciable mortality rate.

Summary

In a review of 425 cases of acute small bowel obstruction[1] a mortality rate of 15.7 per cent was noted for the years of 1945-1950. Comparing this figure with the 47 per cent mortality rate noted in Gibson's series of 1900 one would justifiably feel encouraged by the improvement. A mortality rate of 15 per cent is still appreciable. In an effort to determine just what could be done to lower this mortality rate a comparison between the factors responsible for acute intestinal obstruction in 1900 as compared to 1950 is being herein reported. Obviously a reduced incidence in etiological factors will reflect itself in a reduced incidence of acute intestinal obstruction. This would of necessity result in a further reduction in mortality rate.

The great preponderance of females over males having acute small bowel obstruction in 1950 as compared to 1900 is solely due to the fact that considerably more pelvic surgery is being done now as compared with fifty years ago. Figure 2 demonstrates rather well the preponderance of pelvic surgery which preceded the onset of small bowel obstruction. A reduction in the numbers of such patients operated upon would appreciably decrease the number of obstructions.

An increase in the life expectancy in the past fifty years has inevitably resulted in an increase in the number of individuals above the age of sixty being treated for acute small bowel obstruction. Figure 1 demonstrates that the largest number of patients were found to be between forty to sixty years old. Twenty-three per cent of all patients were sixty to ninety years old. In this group of ninety-eight patients over the age of sixty the mortality rate was found to be 24 per cent.

Adhesions was found to be the most common cause of acute small bowel obstruction. This appeared to be three times as common in 1950, as compared to 1900. A further reduction in mortality rate from intestinal obstruction must begin with an attempt to reduce this factor. Earlier diagnosis and treatment for those patients in whom obstruction from this cause occurs is most desirable. Surgery for lysis of adhesions in the absence of acute obstruction is poor surgery. The only effect of this type of surgical intervention is the formation of more adhesions. Several patients in our series of cases were subjected to seven such operations be-

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The Diagnostic Problems of Cancer

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DESPITE the growth and expansion of cancer centers and cancer detection clinics in this country, the burden and major responsibility for the recognition of cancer while it is still curable, still rests, and properly so, in the hands of physicians in private practice. Thus whether or not he even attempts to treat cancer himself, the physician with a general practice is, at the present time, in the best position to reduce the mortality rate of this disease.

In a large hospital devoted to cancer, such as Memorial Center in New York, we have an unusual opportunity to observe what happens to the cancer patient with respect to the diagnosis of his disease. More than 8,000 persons a year are now being seen in our Examining Clinic, of which more than half have some form of neoplastic disease. This is, of course, a selected population for these are patients who come or are sent to us because it is suspected, or even known, that they have some form of tumor or cancer. Most of them are, in fact, referred to us by other physicians or hospitals, although it is estimated that about 40 per cent come of their own accord. As in most large cancer clinics we see a large number of patients who have cancer which is not early, and at the other end of the scale, not a small number of people present themselves with a variety of imposing complaints for which we can find no organic cause or with symptoms due to other diseases. Nevertheless, a considerable number of patients with early cancer and pre-cancerous lesions are seen, and it is also not a rare occasion to discover pre-symptomatic cancer in some patients who have come because of unrelated symptoms. From this experience some impression may be gained of the problems and failures to arrive at a correct diagnosis within that critical interval between the onset of the disease and its widespread dissemination, or, for all practical purposes, before it becomes incurable.

In all fairness and humility, it may be well to state at this point that, by reason of the very nature of the processes concerned, there are important forms of cancer in which early recognition seems almost impossible of attainment by any practicable means at present, or in which the eventual outcome is not altered even when the disease is detected in its earliest recognizable form. It is chastening indeed to face up to this situation as it concerns, for instance, the leukemias, cancer of the pancreas, or of the esophagus, or even some more aggressive forms of cancer of almost every organ system. But, fortunately, these are not common forms of cancer and they are responsible for but a relatively small proportion of deaths. However, in those cases where the early diagnosis is possible and there are efficient means of eradicating the disease in its early stages, the recognition of cancer is also not always easy and here we, as physicians, assume a great responsibility.

Cancer of the breast may be taken as an example. It is the most common cancer that we encounter and many patients are seen before the classical signs develop. In any case of a mass in the breast, or a firm or discrete thickening even in the presence of chronic cystic mastitis, or a nipple rash or discharge, or any suggestion of skin dimpling or axillary adenopathy, there should be but one recourse to action and that is to obtain pathological verification of the nature of the lesion without delay. It is true that these are not necessarily the signs of cancer, for some benign lesions, such as fat necrosis, may be clinically indistinguishable from cancer, but the risk of adopting a "wait and see" attitude may lead to disaster.

Biopsy, then, is the only reliable means of establishing a diagnosis. In our Examining Clinic, this is left to the surgeons prepared to treat the patient, and this is as it should be in private practice as well. The methods of transillumination, soft tissue x-rays with or without intraductal injections, phlebograms, exfoliative cytology of nipple secretions, or even the more recent tracer studies with radioactive phosphorus (p^{32}) are not in themselves sufficiently reliable to exclude cancer, and, because of the price in time, effort or cost, they are not to be recommended for general use. The place of aspiration biopsy requires some elaboration. At Memorial, we are fortunate enough to have pathologists who are experienced in the reading of such tissue sections and the aspiration biopsy is frequently used to advantage. However, it is well to stress that this is used chiefly for con-

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venience, such as in planning large operating schedules. When positive for cancer it eliminates the need for awaiting frozen sections at operation. When negative, it means nothing and formal biopsy must be resorted to, unless after aspiration of a cyst, a mass is no longer palpable. Needless to say, in the latter case, these patients are carefully followed so as not to overlook an associated underlying mass. In so far as I know there has not been a proven case of dissemination of breast cancer by this method in our experience.

Cancer of the uterus may be accompanied by few if any signs or symptoms in its early stages. Abnormal vaginal bleeding is always an indication for thorough pelvic examination for cancer, yet certainly in cancer of the cervix, even the usual initial symptom of post-coital bleeding occurs well after the disease may be first detected. We are convinced that we cannot tell a benign cervical erosion from early cancer on sight, and I cannot stress too strongly the danger of cauterizing cervical erosions without first getting microscopic verification of what is being treated. In regard to biopsy, it goes without saying that a pathologist can examine only that bit of tissue presented to him; a small focus of early cancer may be missed unless multiple punch biopsies and/or an endocervical curettage or coning biopsy are done. The Schiller test is helpful only in pointing out areas for biopsy. The place of the Papanicolaou smears is a controversial issue. My own position on this is that if a pathologist well-trained in exfoliative cytology can be consulted, this method is a useful and convenient adjunct. The taking of the smears is a very simple procedure and may detect early cancer which is not readily visible on colposcopy. However, therapy should *not* be instituted on the basis of the cytological smear alone without confirmation by formal biopsy. If the biopsy by the multiple technique is negative, the patient should be followed carefully and have repeat smears and biopsies at frequent intervals, or should be referred to someone expert in this field.

The Papanicolaou smear may also be positive in endometrial cancer. Although it will detect a smaller percentage of cancer of this part of the uterus, recent reports of smears obtained by endometrial aspiration are encouraging.[3] However, in suspected cases of carcinoma of the body of the uterus, endometrial curettage (and, of course, microscopic examination of curettings) is still the most reliable means at hand for diagnosis. As cancer of the endometrium most commonly occurs in older women, it may be well to stress that the normal menopause is characterized by sudden cessation or gradual reduction in frequency and amount of menstrual bleeding, and any variation from this or any post-menopausal bleeding should lead to a suspicion of cancer.

Cancer of the stomach is a formidable challenge. We do have a good diagnostic method in that a presumptive diagnosis of gastric cancer can be made in over 90 per cent of cases by combined radioscopic and radiographic examination of the upper gastrointestinal tract by a competent radiologist. *But* it would seem that the best prospect of increasing the curability of gastric cancer lies in the ability to detect this disease even before the patient is aware of any symptoms. The experience in cancer detection clinics would seem to indicate that it is impractical and too costly to routinely examine radiographically all asymptomatic patients (even those in the gastric cancer age group) every six months. On the other hand, similar experiences show that when only patients with gastric anacidity are thus screened the detection of stomach cancer rises appreciably to almost one in every 100 patients examined, and in patients with pernicious anemia to three to five per 100 examined. However, it is well to remember that gastric carcinoma can exist even when the patient has free hydrochloric acid in his gastric contents and only 51 per cent of our patients with gastric cancer have had achlorhydria. There is at this time no simple solution to the diagnostic problem of gastric cancer. The practising physician must maintain a high index of suspicion of cancer in all patients over the age of forty who present any gastrointestinal symptoms and must impress these patients with the need for further diagnostic studies. The recently devised quininium cation resin[4] test promises to offer a ready and reliable means of detecting achlorhydria without the inconvenience of stomach intubation. This can easily be done in one's office and if gastric anacidity is found, the patient should be urged to have roentgen studies. The routine testing for occult blood in the stool, which can be done simply by doing a guaiac test on feces adhering to examining finger after rectal examination, is also very helpful. If found to be positive, this should, of course, be rechecked with the patient on a meat free diet and then, if consistently positive, search should be directed to a cause within the gastrointestinal tract. Some physicians of my ac-

quaintance in the New York metropolitan area have been able to make arrangements with roentgenologists to do fluoroscopic examinations of the stomach instead of the regular gastrointestinal series at a considerable saving to their patients. In competent hands this would seem an excellent and reliable screening test. Needless to say all gastric ulcers should be regarded with suspicion that they may represent gastric cancer. Gastroscopy may be of some assistance in differentiating these lesions if an experienced endoscopist can be consulted. By use of the rigid gastroscope, carcinomas of the cardiac orifice of the stomach may be visualized and even biopsied. In lesions of the lower portions of the stomach, visualization by the flexible gastroscope may add to proper interpretation. Recently, Cooper[2] has developed an ingenious gastric balloon for securing specimens for microscopic examination by the Papanicolaou method. Early results with this technique are quite encouraging and it would appear to offer considerable promise for differentiating between benign and malignant gastric lesions. Cooper and Papanicolaou have reported over 95 per cent accuracy with this method in over 200 patients with stomach lesions.

Now passing to the lower end of the gastrointestinal tract, there is good reason here to do much better than we are doing. Seventy-five per cent of all cancers of the rectum are within reach of the examining finger and it is surprising to see how many we have seen which were missed or not picked up earlier before coming to our clinic. It should be unnecessary to point out that a digital rectal examination is a necessary part of any adequate physical examination. A frequent error is to attribute rectal bleeding and/or other lower bowel symptoms to hemorrhoids without looking further. In *any* patient with rectal bleeding or lower bowel symptoms, proctoscopy and a barium enema are indicated whether or not the patient has hemorrhoids or anal fissures for it is not unusual to find these as concomitant findings in patients with cancer of the lower bowel. Approximately 60 to 70 per cent of *all* large bowel cancer should be within the reach of the proctosigmoidoscope and it should be within capabilities of the average practitioner to be able to do this examination. In the Strang Cancer Detection Clinic at Memorial, polyps have been found in one out of every twenty patients proctoscoped and this is done there as a routine in all patients over forty-five years of age and in those who have guaiac positive stools. Five per cent of these polyps were cancer. When seen, a polyp should, of course, always be biopsied and removed, although the latter should be left to the proctologist or surgeon prepared to treat the patient. The barium enema followed by air contrast studies is a reliable means of detecting lesions higher in the large bowel. It does not substitute, however, for the digital rectal and proctoscopic examinations. Apparently this is not generally recognized. A case that I have seen recently may serve to emphasize this point. This man who had lower bowel symptoms, went to his doctor and was sent directly to a radiologist for a barium enema. The barium enema was reported negative and thereupon his physician told him nothing was wrong. The patient, however, was not satisfied with this opinion, and came to our clinic. His symptoms suggested cancer of the lower bowel and indeed an annular mass was palpable on digital examination. This was readily confirmed by proctoscopic examination and proved by biopsy to be cancer.

Cancer of the lung appears to be assuming increasing importance. Many recent reports indicate that there is a real and alarming increase in the incidence of lung cancer in both men and women. Moreover, it is becoming apparent that, as in stomach cancer, the best prospect for improving results in the treatment of this disease also rests upon its detection in the pre-symptomatic phase. To await the attendance of symptoms will mean that the large majority of patients will be found to have disease which has extended beyond the confines of the lung. The simple expedient of the routine x-ray examination of the chest is still the most useful method for detecting lung cancer even though it has no characteristic or pathognomonic roentgen appearance and may mimic other diseases. However, resort to the adjuvant procedures of bronchoscopy and exfoliative cytology of sputum or bronchial washings will resolve these difficulties in a large percentage of cases. In some instances where a lesion is situated in the periphery of the lung fields or diagnosis cannot be established by the Papanicolaou smears or bronchoscopy, aspiration biopsy under fluoroscopic control has often been used successfully at Memorial for establishing the diagnosis. However, in recent years this procedure has not been used as frequently as formerly on our Thoracic Service, primarily because the exfoliative cytological method has greatly extended our diagnostic capabilities and also because it would seem

that exploratory thoracotomy can now be undertaken with no greater risk than exploratory laparotomy.

The late Dr. James Ewing is said to have once remarked that cancer is not one disease, it is a thousand different diseases. The ramifications of the problems encountered in the diagnosis of cancer would seem to bear witness of this. In this presentation I have merely touched some high points of a few of the more common forms of cancer and have, of course, omitted discussion of many challenging problems with regard to head and neck cancer, the lymphomas and leukemias, thyroid cancer, cancer of the urinary tract, and cancers of many other organs which are not any less important. To have included them, however, would have made this presentation unavoidably long.

By way of summary I should like to state that there is *no* single simple biologic test which is a reliable indicator of cancer *per se*. Yet, much can be accomplished with what we already have at hand and the physician in private practice is in the best position to change our outlook on cancer. The accomplishment of this depends in good measure on maintaining a high index of suspicion of cancer, particularly in older patients, and a determination to attempt to recognize cancer in its pre-symptomatic stages. There is no substitute for the taking of a careful history and doing a complete physical examination. All patients with a previous history of cancer, or with diseases such as Paget's disease, chronic cystic mastitis, benign gastric ulcers, polyps of large bowel, pernicious anemia and other diseases in which cancer is more likely to develop should always be especially watched and followed carefully. Roentgen examinations and the new methods of exfoliative cytology are important adjuvants for the diagnosis of pre-symptomatic cancer, particularly of the stomach and lung, and these and other ancillary studies can be reliable diagnostic tools when properly used. Finally, when there is even the mere possibility that cancer exists, therapy should never be undertaken without first attempting to obtain microscopic verification of what is being treated. In closing, I might point out that Cameron,[1] of the American Cancer Society, estimates that even with the case finding methods now available, the over-all curability of cancer of the uterus can be increased from the present overall rate of 30 per cent to 80 per cent, of cancer of the breast from the present 35 per cent to 65 per cent, and of cancer of the rectum from the present 15 per cent to 85 per cent.

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INTESTINAL OBSTRUCTION

(Continued from Page 1196)

fore becoming acutely obstructed. The only indication for surgery in this group of patients should be the presence of acute intestinal obstruction.

The reduction in the percentage of patients with obstruction caused by hernia from 35 per cent in 1900 to 7.7 per cent in 1950, attests to the value of early repair or correction of all potential sources for bowel obstruction. The same may be said for the reduction in gallstone ileus from 4 per cent in 1900, to 1.6 per cent in 1950.

In the final analysis, the clinical judgment of the attending physician or surgeon and his ability to handle this type of problem is our only hope for decreasing the mortality rate further.

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Some Observations on the Diagnosis and Treatment of Varicose Veins

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DESPITE important refinements in diagnosis and surgical technique, the ideal treatment for varicose veins has not been found. Nor, is it likely that medical science will devise any "perfect cure" for this disability as long as people continue to inherit weak veins and engage in occupations requiring prolonged sitting and standing.

Heredity probably accounts for the tendency to varicosities. But it is only when people fail to exercise their legs by regular walking that primary varicose veins are likely to develop. Many industrial workers, who stand for eight hours a day and who ride to and from work, suffer from this vascular disorder.

In the treatment of this disability, the first step, as in every medical or surgical case, starts with a careful history. Such a history in varicose vein cases can be quite brief but is necessary to determine the importance of varicose veins to the individual. Often some other disability may be uncovered which is the basis for symptoms erroneously attributed by the patient to varicose veins. For example, many patients attribute pain in the calf muscles to varicosities when the real trouble is due to pes planus. Obviously, vein ligations will not relieve them of the muscle strain incident to their flat feet.

The history may help to determine whether the varicose veins are primary or secondary. If they are secondary to an old deep femoral phlebitis, ligation of the saphenous system will not rid the patient of his chronic edema. All these salient points of history can be elicited in a few minutes if the doctor has his questions marshalled in his mind and does not wander to unrelated fields.

Method of Examination of Legs

No one should elect to treat varicose veins who does not have the time to properly examine and evaluate each case. Most of the failures can be traced to inadequate preoperative diagnostic work. In all cases of varicose veins, the physical examination should cover the essentials of heart, lungs, abdomen, blood pressure, and urinalysis especially if surgery is contemplated. But no one who professes to treat varicose veins is justified in giving the lower extremities a cursory look and calling that an adequate examination.

To examine the lower extremities, the patient should stand on an elevated platform in bare feet with no encumberance of clothing below the pelvis. Such a platform can be easily constructed at small expense. The examiner should inspect the legs in a good light, anteriorly and posteriorly, noting the size and distribution of the veins, the color of the skin, rashes, ulcers, et cetera. He should mark with ink any bulges in the veins as possible sites for "blowouts." These bulges are frequently seen where an incompetent perforating vein joins the saphenous system. He should also note any orthopedic defects, such as flat feet. Skin temperatures can readily be determined by the hand. If edema is present, the degree of pitting should be determined and whether it is bilateral or unilateral. After this preliminary inspection, the patient should be seated on the examining table and the dorsalis pedis, posterior tibial and popliteal pulsations felt. If they are absent, oscillometric readings should be taken.

The next step is to do one of the modifications of the Trendelenburg test.[11] Since 1940, we have used the multiple tourniquet test described by us in a previous publication.[10] In our hands, this test has proved invaluable in the accurate location of incompetent communicators ("blowouts"). Pratt's[8] test may also be used for the same purpose. We found it more time consuming and no more accurate than the multiple tourniquet test. The same may be said for Oschner's[5] modification of the Perthes' test.[7] Oschner's test is of value, however, in cases of slow "blowouts" where one cannot be sure of the diagnosis.[1]

Multiple Tourniquet Test

The multiple tourniquet test has enabled us to locate the exact level of incompetent perforators in the majority of cases. This test is done as follows. With the patient prone on the examining table, the leg is elevated until all superficial veins are emptied. Soft rubber tourniquets are placed at the sapheno-femoral junction, mid thigh, low thigh, just below the knee and in mid leg. The patient stands. Tourniquets are removed, one at a time, from below upward. The examiner

observes each segment as the tourniquet is loosened for any evidence of filling of the veins. If a vein fills that segment is marked lightly with ink. When all tourniquets have been removed, the test is repeated. This time, the tourniquets are placed at the levels suspected of being the site of incompetent perforators. Several such repeat tests may be necessary to be sure that the exact site of the "blowout" is located. It is important that the multiple tourniquet test be done at least once while observing the posterior aspect of the leg and thigh. Only thus will incompetence of the lesser saphenous system be discovered.

To be sure that no "blowouts" are missed, it is advisable to perform a Perthes' test, placing the tourniquet below the lowermost level of incompetence. If, after the patient has walked briskly for five minutes, all veins below this tourniquet are empty, we may be certain that no "blowouts" exist below the level of the tourniquet. This is helpful in doubtful cases. It also serves to test the ability of the deep system to function adequately.

When the various levels of communicator vein incompetency have been determined, the examiner should, first, note in his record the exact location of each "blowout" and, second, mark such "blowouts" by some method so that they can be located at the time of surgery. I have found that the use of a 70 per cent silver nitrate applicator, moistened with water and lightly touched to the spot of the blowout, will leave an easily recognized mark for about ten days. Caution should be exercised not to place too heavy an application of the silver nitrate on the skin or a slough will result. If surgery is to be done within several days, an alternate method is the use of scratch marks made with a 20 gauge hypo needle.

Vein Stripping Versus Multiple Ligations

During the past decade, the pendulum in vein surgery has swung back to the various vein stripping procedures which were first used at the turn of the century. Either the extraluminal stripper introduced in 1906 by Charles Mayo[6] or the interluminal acorn tipped strippers advocated at that time by Babcock[2] are being employed. Numerous modifications of these two types of strippers are in use at present. Vein stripping was abandoned thirty years ago because of the associated high morbidity. Reasons given for its revival were that (1) too many incompetent communicators were being missed and (2) available methods of diagnosis were inadequate to locate such incompetent veins. Without doubt, the first reason was true as long as the classical Trendelenburg test was used. The second reason is questionable since there are at least three tests available to locate "blowouts," namely, Pratt's test, Oschner's test and the multiple tourniquet test.

The surgeon need not choose sides between multiple ligations and vein stripping. The choice should be based upon the patient's individual needs and not upon preconceived surgical ideas. Both methods have their place in the surgeon's armamentarium. He must weigh the value of the radical stripping procedure with increased hospital stay and morbidity against the less mutilating but equally effective multiple ligation procedure. In our hands, the multiple ligation procedure has yielded a recurrence rate of only 3.4 per cent in two hundred ligations.[10] Vein stripping procedures give about the same recurrence rate. This is because it is almost impossible to remove all the superficial veins in the leg unless very radical surgery is employed. As now performed, stripping removes the greater saphenous vein but not the principal branches. Complete extirpation of the entire superficial venous system is not practical.

Which cases then should be reserved for vein stripping? In my opinion, those patients should be selected for stripping where the veins are large and where more than three "blowouts" are found in the same leg and also where there may be several questionable "blowouts" of the slow leak variety. In such instances, the additional incisions needed for stripping will not greatly add to the morbidity.

However, when multiple tourniquet tests, carefully done, indicate the presence of only one or two "blowouts" in addition to incompetence at the sapheno-femoral junction, it seems advisable to confine surgery to combined high-low ligations. Such surgery will usually incapacitate the patient for only two or three days instead of the usual seven to ten days needed for recovery from stripping procedures. This is of importance to those patients who cannot afford the greater loss of time from work required by stripping. The surgical dictum should be to do the least amount of surgery that will do the most good. No matter which type of surgery is selected, vein stripping or multiple ligations, it is essential, as Homans[4] emphasized nearly forty years ago, to ligate the saphenous vein at its junction with the femoral vein as well

as to ligate all branches of the saphenous vein in the region of the fossa ovalis. Many recurrences come to our attention because one or more branches have been overlooked. Also, the saphenous vein itself sometimes is missed when a large branch is mistaken for it. These errors can be avoided by adequate exposure of the saphenofemoral junction.

When To Use Sclerosing Solutions

Since Secard[1] popularized the injection of veins with sclerosing solutions in 1920, we have learned that the injection of sclerosing solutions alone will not affect permanent obliteration of varicose veins when the Trendelenburg test is positive or double positive. The procedure of retrograde injection of sclerosing solutions, extensively practiced until vein stripping was revived, was fraught with considerable danger of deep thrombo-phlebitis.[1,3] It was never a satisfactory adjunct to the surgical procedure. However, postoperative injection of remaining varicosities often is necessary to complete the treatment. It is a relatively safe procedure if (1) ligations have been adequate and (2) the amount given at a single session is limited to 3 or 4 cc.

Regardless of the type of surgery, there should be a regular periodic follow-up of these cases at approximately a six months' interval. Each patient should be told at the time of surgery that there is no known treatment which can eliminate the inherent weakness responsible for his having varicose veins. At each check-up examination, any small varicosities seen should be injected with sclerosing solution. This procedure, in my hands, has resulted in only two recurrences among some 300 patients seen since 1945. That is, of some 300 patients with varicose veins, only two suffered a recurrence within a six-month period. Both were bartenders. On the other hand, we have seen recurrences following both multiple ligations and vein stripping in those patients who have had no follow-up. The average period for recurrence is about two years.

Summary

Although there is no known method for the treatment of varicose veins which will result in a permanent cure in all cases, refinements in diagnostic technique have resulted in more accurate ligation of incompetent perforating veins. The multiple tourniquet test, in our hands, has led to an accuracy in the location of such incompetent veins resulting in a one-year recurrrence rate in 200 cases of only 3.4 per cent.[10]

The multiple tourniquet test has been described. It was pointed out that only by careful examination can a low recurrence rate be achieved.

The choice between multiple ligations and vein stripping should be determined on the basis of the patient's need and not on the basis of preconceived surgical opinion. Vein stripping should be reserved for those cases with three or more "blow-outs" in the same leg. Only then can the added morbidity be justified.

The surgeon should stress the need for follow-up examinations at six-month intervals. If small varicosities are discovered, they should be treated by sclerosing injections before they become large enough to cause symptoms and before incompetence of communicating veins occur. Only thus is it possible to prevent the recurrence of varicose veins.

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Our Heritage in British Medicine from Bright to Gull

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JUST a quarter of a century ago, it was my good fortune to spend a period of months in sundry medical haunts of the British Isles. Much water has passed under the bridges of the world since those meanderings; but the semi-youthful enthusiasm of that time developed, and a more mature appreciation has fostered, a deep regard for the then current luminaries of British medicine and, perhaps, in particular, for those worthies on whose shoulders they stood—those who had peopled the medical scene the century before.

One cannot go far in the history or philosophy of medicine without coming much into the literary company of the late Sir William Osler. Following the dictates of one of his most charming essays, I was indulging myself some time past in the reading of a recommended minor classic—"Middlemarch," by George Eliot. This novel covered fictionally a considerable segment of this beforementioned epoch in British medicine and temporarily, at least, set askew the halo which I had placed over that period.

For writing in 1872, the year before Sir William Gull gave his classic description of myxedema, the author, sketching a young physician's start in practice, indulged herself in the following paragraph:

"Lydgate would keep away from the range of London intrigues, jealousies and social truckling and win celebrity, however slowly, as Jenner had done, by the independent value of his work. For it must be remembered that this was a dark period in British medicine, and in spite of venerable colleges which used great efforts to secure purity of knowledge by making it scarce and to exclude error by a rigid exclusiveness in relation to fees and appointments, it happened that very ignorant young gentlemen were promoted in town and many more got a legal right to practice over large areas in the country. Also, the high standard held up to the public mind by the College of Physicians, which gave its peculiar sanction to the expensive and highly rarified medical instruction obtained by graduates of Oxford and Cambridge, did not hinder quackery from having an excellent time of it; for since professional practice chiefly consisted in giving a great many drugs, the public inferred that it might be better off with more drugs still if only they could be got cheaply, and hence swallowed large cubic measures of physic prescribed by unscrupulous ignorance, which had taken no degrees."

This, then, was the pessimistic impression of medical practice in the British Isles, in the year of our Lord 1829, when the fictional Lydgate, who has become the personification of the intelligent eagerness of the young family doctor, entered into the practice of our noble art. Was the picture a true one? Was the dour opinion of this erudite lady by the ambiguous name of George, a fair picture of the medical time? Let us survey the record!

A little Corsican had swashbuckled his relatively unchecked way across most of Europe, and had failed in his final quest for power at Waterloo (and he was not the last little corporal to follow a similar course). He had gone from his prison spot on St. Helena eight years before, to meet his Marshals in some other land, and Europe was at peace again.

The Gold Headed Cane, after gracing the hands of England's most eminent physicians, from Sydenham to Jenner, had just come to rest in a corner of the library of the fifth and newest home of the Royal College of Physicians, in Pall Mall, where, although somewhat blasted and bashed by bombs, it serves this same function today.

Two years later, Jenner, having removed another scourge from humanity in giving life and scar-saving utility to cowpox, having given what was probably the first description of disease of the coronary arteries as a cause of cardiac failure, characteristically enough, had been borne, though Westminster Abbey beckoned, no further than across his own garden plot to the chancel of Berkeley Church in Gloucester, to take his well earned rest.

James Parkinson, with Jenner, another of John Hunter's pupils, had given his classic description of paralysis agitans and reported the first case of appendicitis in the English language. Dying in 1824, he was perhaps the first of note in that line of brilliant workers at Guy's Hospital in London—"the great men of Guy's"—whose worth was just being recognized in the blooming genius of his young successors, Bright, Addison and Hodgkin.

Richard Bright, after some thirty-one years spent in preliminary and medical education and travel, came to Guy's Hospital and started a career marked

Presidential address presented before the Detroit Academy of Medicine.

by great industry, accuracy of observation and clear judgment. His particular interest, even from his student days, was in the morbid anatomy of the kidney. He spent from four to six hours a day in the wards and post-mortem chamber, and just seven years later, published his "Report of Medical Cases" containing, among other things, his original description of essential nephritis and for the first time a clear-cut distinction between cardiac and renal dropsy was made. Bright's picture, excepting the microscopic appearance of the kidneys, biochemical alterations in body economy, and the frequent concomitance of high blood pressure, would very well stand today. This was not his sole contribution by any means, for he was a pioneer in cerebral localization, gave one of the earliest pictures of acute yellow atrophy of the liver, was the first to mention the frequency of heart murmurs in chorea and the first to demonstrate the presence of hooklets in echinococcus cysts. Even with his voluminous writings, Bright taught students for a quarter century, was an increasingly busy practitioner of medicine, and the most sought after consultant in London. He was a kindly, unassuming man with a host of friends, who approached everything with a philosophic verity. It was said of him that there were few who recorded so much and reasoned so extensively, who had subsequently to retract so little. He died in 1858, at the age of sixty-nine, probably pathologically as well as literally of "Bright's disease." He, who had used the post-mortem chamber so extensively, would allow no autopsy to be done on himself.

Bright's closest contemporary and associate at Guy's was Thomas Addison, who had come to the hospital in practically the same year and a decade and a half later became joint lecturer with him in Medicine. The two men upheld and raised the fame of Guy's by their co-partnership. Like Bright, Addison was a keen clinician, an ardent habitue of the post-mortem chamber, and based his investigation on careful clinical and autopsy observation. His first published work, "The Operation of Poisonous Agents on the Living Body," was the first serious investigation in England into the phenomena of systemic poisoning. However, the achievement of Addison which attracted the most general notice was his discovery of a disease of the suprarenal capsule, which has since gone by his name.

At consultation on a clinical problem which had baffled the investigations of his confreres, Addison, after careful inquiry, stated positively that the patient suffered from a disease of the suprarenal bodies, which would before long prove fatal. This opinion was received with polite incredulity, but it was proved correct by autopsy, the suprarenals being the only organs diseased. Of course, the disease was not discovered in this apparently sudden and striking manner, but was the result of many years' observations, in which Addison's powers of deduction from a few cases and meager data were strikingly evidenced. In the preface to his treatise on "The Constitutional and Local Effects of Disease of the Suprarenal Capsule," read before the South London Medical Society in 1849, he described a condition perhaps more prevalent and of greater clinical importance than Addison's disease *per se*. This was pernicious anemia, also called Addison's or Addison-Biermer anemia, which just seventy-five years after his initial description fell largely under the control of an effective medical approach.

Similar as were their professional habits and points of view, Addison was, in person, in striking contrast to Bright. The latter was the son of wealthy parents, had had every advantage that travel and education could bring, and was handsome, cheerful, sociable and popular wherever he might be. Addison on the other hand, came of humble origin, with little of this world's goods and with a youth spent, in consequence, in hard work for a livelihood. He lacked the other's cheeriness and charm, was blunt, and at times presented the impression of a haughty rudeness and arrogance, much of which was but a cloak for his innate shyness. His powerful frame concealed a most acute nervousness of temperament which most deeply affected him in times of trial. He has said of himself, "I never rose to address the Guy's Junior Physical Society without feeling nervous." Yet his listeners would depart with the feeling that he had spoken to them in a tone of bluster and self-assurance. He continued his fruitful and valued association with Guy's Hospital until a few months before his death from some brain disorder, in 1860.

The third addition to this famed triad was Thomas Hodgkin, as different from each of the others in his personal characteristics as it was possible to be. He was a consistent member of the Society of Friends and always wore their dress and employed their distinctive forms of speech, in his writings as well as in his talk. A philanthropist and reformer by nature, it was apparently this independence of spirit which drove him away from

Guy's after a relatively short association of ten years. During his stay he served as curator of the hospital museum and demonstrator of morbid anatomy, to the special advantage of the School and to the advancement of pathology throughout the world. Hodgkin was the first to describe clinically the condition characterized by simultaneous enlargement of the spleen and lymphatic glands (which had been outlined pathologically, however, by Malpighi in 1665). Nevertheless that devoted and illustrious biographer of Guy's Hospital, Samuel Wilks, proceeded to stamp it as a clinical entity with the name, "Hodgkin's Disease," and as such it has remained. Hodgkin himself had no intention of defining as a pathological entity this frequent association of lesions, which, as he himself stated, must have been observed repeatedly by other pathologists. A careful analysis of his paper, "On Some Morbid Appearances of the Absorbent Glands and the Spleen," makes it clear, in the light of modern knowledge, that he was dealing with cases of varied etiology, including general tuberculosis, the leukemias, and perhaps the lymphogranulomatoses. Even today, a century after Hodgkin's report, the classification of the individual members of these affections of the lymphatic system is anything but simple; and in that day, before the development of cellular pathology, and before more modern methods of blood examination had come into existence, such differentiation was usually quite impossible.

Hodgkin gave a description of insufficiency of the aortic valves, which antedated Corrigan's by three years, and his "Essay on Medical Education" published in 1828, remains a classic still. After his unsuccessful candidature for the post of assistant physician at Guy's he resigned to take a similar position at St. Thomas Hospital. Away from his beloved specimens, which he had so painstakingly collected through his years at Guy's, he soon became dissatisfied and went into the private practice of medicine in London. But he was exceedingly generous by nature and careless in collecting fees; he gradually dropped out of the medical scene and devoted the latter years of his life to philanthropic work. It was in this latter capacity that Hodgkin formed his deep and lasting friendship with Sir Moses Montefiore, the Jewish philanthropist; it was while traveling with Sir Moses in the Orient that he died, at Jaffa, of dysentery, in 1866, at the age of sixty-eight.

In addition to his individual genius in the art of medical and pathological observation and correlation, each of the foregoing—Bright, Addison and Hodgkin—had further common ties. Their respective medical degrees bore the name of Edinburgh University. It is interesting to digress momentarily to consider that seat of learning in the "Athens of the North" and the part it played in the period that we are scanning.

During the last half of the eighteenth century, with the stimulus of the Hunters, the Monros, Cullen, Whytt and their less famous associates, Edinburgh University had become the medical Mecca for the English-speaking world, with most of its medical faculty stemming from the scant teaching ward of Boerhave in Leyden. American medicine had its birth within those walls, in the persons of Morgan, Shippen and Rush from Philadelphia, in particular. With their return to the American colonies, they took the first steps in the organization of American medical education by the forming, at the College of Philadelphia in 1765, the Medical Department of the University of Pennsylvania. This was the first medical school in the Colonies. But, more germane to our discussion, Edinburgh University nurtured, as well, those men who were to be the pillars of the Dublin School of Medicine, which, although its prime lasted but a few decades, did far more than its share to advance clinical medicine. The Dublin School competed on at least even terms with the "Great Men of Guy's," a few of whose members we have just considered.

Perhaps the true founders of the Dublin School were (1) John Cheyne, who in 1815 published a paper on "Acute Hydrocephalus" and three years later gave his original observations on rhythmical ascending and descending periods of respiration; (2) Abraham Colles, a surgeon whose particular interest to the clinician lies in his promulgation of Colles' law in regard to hereditary syphilis, and (3) Robert Adams, who left classical accounts of essential heart block and "rheumatic gout." Others were William Wallace, who is remembered for the introduction of the use of potassium iodide in the treatment of syphilis, in 1836, and Frances Rynd for the initial employment, in 1845, of hypodermic injection of medications by an ingenious gravity device of his own invention. But the names looming largest in the annals of the Irish school were those of Graves, Stokes and Corrigan, who, in their influence on internal medicine in America,

compare with John Hunter and Astley Cooper in theirs upon surgery.

All were born in Dublin, Robert Graves a few years the senior of the others. Although the son of a clergyman, he apparently had considerable means at his disposal, for after graduating in medicine, he made a three-year tour of the various European medical clinics.

Graves inherited the natural humor of his race. Stokes, who had been his pupil for a short time and then his life-long friend, said of him at this time,

"Nature had been bountiful to him. He was tall in stature, dark complexioned, and with noble and expressive features. He had at once a warm and sensitive heart and ever showed lasting gratitude for the smallest kindness. His mind was open and unsuspicious, but occasionally he fell into the error of thinking aloud, without considering the nature of his audience and of letting his wit play more freely, and his sarcasm cut more deeply than caution might indicate."

Though Boerhaave had utilized the bedside method of teaching one hundred years before, and that reportedly on a twelve-bed ward, it was left for Graves and his associates to popularize it. They consistently and successfully used the bedside teaching method in the Heath Hospital and the Park Street School of Medicine, of which Graves was co-founder.

According to Reisman, "Physical examination at that time had barely emerged from its age-old chrysalis. Percussion was still in the hands of the few, notwithstanding the fact that Auenbrugger's great discovery was more than fifty years old and the translation of his book by Corvisart, the method's foster-father, about twenty. The stethoscope was looked upon by many as a toy. Physical examination was considered of minor importance, and just as men today are prone to inveigh against the laboratory as stifling the older methods of careful physical examination, so in the days of Graves and Stokes, it was common practice to decry the Laenneckian method and that of Auenbrugger as threatening to cause a neglect of the study of symptoms."

At the bedside, Graves appeared to best advantage. Protecting the patient always, he made bedside teaching more than didactic instruction, and by giving the students genuine responsibility in the examination and care of patients, he succeeded in bridging "the impassable gulf which in that aristocratic era lay between the student and the teacher."

This departure in clinical instruction probably constituted Graves' greatest contribution to medicine. Generally, he is best known for his description of hyperthyroidism, in 1835, a description which, while it was not the first, was so complete that it carries his name even now. He emphasized pulse taking by the watch, first observed the pinpoint pupil, and in his "Clinical Lectures," which covered almost the entire field of medicine, he gave to the world a treatise of sufficient worth to have his great contemporary, Trousseau, from the other side of the channel, say to his students:

"For many years I have spoken well of Graves in my clinical lectures. I recommend the perusal of his work; I entreat those of my pupils who understand English to consider it as their breviary; I say and repeat that of all the practical works published in our time, I am acquainted with none more useful, more intellectual."

It was a peculiar paradox, adhering as he did throughout to the essentiality of fever, and looking upon it as a disease entity, that Graves should have been the one to cease starving and purging patients, as was the habit of the time, and to institute tonic and supportive measures. Graves felt the value of this change so strongly that, in expiating to some friends on the healthy appearance of some recovered typhus fever patients in the convalescent ward, he said, "This is all the effect of our good feeding and lest, when I am gone, you may be at a loss for an epitaph for me, let me give you one in three words—'He fed fevers'!" His prodigious labors shortened his life, and he died of some liver disease in 1853, at the age of fifty-seven, as Alfred Stille styled him—"One of the great ones of the earth!"

The association between Graves and Stokes has been mentioned. It was a rare and admirable one, of such a character that it helped greatly to strengthen their mutual influence upon their immediate pupils and the world at large. Whenever an important controversial issue arose, as for instance the use of the stethoscope in auscultation, they entered the lists together, neither jealous of the other. The opposition to this instrument was more intense than can be imagined in this present day, and a large measure of credit must be given to the diligence and enthusiasm of these two men, in popularizing its use.

Stokes had seized the cudgel at an exceedingly early stage, for in 1825 (Laennec, 1819) while a twenty-one-year-old student at Edinburgh, he had published a small octavo volume of 239 pages, en-

titled, "An Introduction to the Use of the Stethoscope, with its Application to the Diagnosis of Diseases of the Thoracic Viscera, including the Pathology of these Various Affections." This was the first work on the subject in the English language, and for it he received seventy pounds, which was no mean sum in those days.

This evident precocity was borne out by his life's work, and while his name is perpetuated for all time in connection with Stokes-Adams disease and Cheyne-Stokes breathing, these are actually among his lesser contributions. He shared in much of Graves' work and did as much through his clinical teaching to give physical diagnosis the place that it deserves in medicine. He added further support by his written treatise on "Diseases of the Chest and Aorta," which for its wealth of observation and its clarity and accuracy of description, constitutes a classic in medical literature. Stokes himself said: "If you would advance a knowledge, be content to take up the thread where the last investigator laid it down and set yourself to carry on his work." Laennec was his guiding star and he had set himself to the task of improving the status of mediate auscultation. He was the first to use the finger as a pleximeter in percussion, however peculiarly, advising that the finger so used be placed with the dorsum towards the chest. In 1845, he succeeded his father as Regius Professor of Medicine at the University of Dublin. Although overwhelmed by a huge private practice he continued to teach and to write until his retirement. He was a close student of human nature and had a saving sense of humor, particularly during the awful days of the cholera epidemic, when he himself suffered from the disease. The highest honors that the medical world could bestow were his, but he prized above them all the degree of doctor of medicine honoris causa from his own University of Dublin. He died at the age of seventy-four, beloved as a man, revered as a teacher and honored in every way that a grateful profession could show its appreciation. Everything that he had written was a model of succint completeness of description, with a consciseness and clarity that warrant wide imitation. In his remarks on the optimism of the tuberculous patient, he said, "The destruction of the lung causes a relief to the patient, and too often we may hear the voice of hope and confidence reverberating in the cavity that seals that patient's doom."

To vie with such contemporaries as these on anything like even terms would have taken a man of far from ordinary stripe, and such was Dominic John Corrigan. After graduating from Edinburgh, he returned to Dublin and associated himself with the Jervis Street Hospital, the master of a medical service of six beds. However, a proper selection of patients and thorough study of the cases at hand allowed him to present a monograph on "Permanent Patency of the Mouth of the Aorta, or Inadequacy of the Aortic Valves," so comprehensive that the intervening years have added little to this fundamental knowledge of aortic regurgitation. Although not the first to discover the disease (the French claim that honor for Vieussens, the English for Cowper or Hodgkin), Corrigan's account is by far the best, and justice is not violated by preserving his association with it in naming the associated pulse, which he so well described, as Corrigan's pulse. He likewise described the expansile pulsation of aneurysm. His reputation and practice gained him eventually much wider hospital associations, particularly with Hardwick Fever Hospital, as a result of which association he prepared a series of lectures on "The Nature and Treatment of Fever," which he published in 1853.

There were many other publications of varied subjects, a number being derived from his keen interest in pathology, which, with his bedside clinics, his kind disposition, and his tireless application to his work, are said to have reminded one of the great Osler, who was to come. Corrigan was a thoroughly big man in every way and competent in numerous fields of endeavor. With his Dublin confreres he shared the constant and active desire to make a better and more fertile field for clinical medicine. In 1847, he was appointed honorary physician in ordinary to Queen Victoria, an unusual distinction for a Catholic. Although blackballed as a presidential candidate by the Royal College of Physicians of Ireland, when his name first came up, he was eventually its president for five consecutive years. His character and personality, his devoted efforts to improve the condition of his fellow men and his scientific achievements readily rank him as one of the great British physicians of the past. As Hancock has said,

> "Corrigan was the last to go, and at his death the Dublin School of Medicine became a part of medical history, but its enviable position for that short span must be forever fresh in the memory of every clinician. Until Judgment Day physicians will bring into the world babies born under Colles' law; and will treat some of them

later with potassium iodide solution as advocated by Wallace, particularly if there be the expansile pulsation of aneurysm or the ill sustained pulse of aortic regurgitation, as noted by Corrigan, or the slow pulse of the Stokes-Adams syndrome, or if there be luetic involvement of the auriculo-ventricular bundle. The development of the Cheyne-Stokes respiration will often warn of death's approach and the end will be more peaceful and free from pain when some modification of Rynd's suggestion for the hypodermic injection of medication is followed. And for all time, as students walk the wards and are permitted direct contact with patients for the purpose of emanuensis and physical examination, they should give continuous thanks for this privilege to the influence of the Dublin school on medicine, at large, and on American medicine, in particular."

Up to this point, our remarks have been restricted to a few men, who would have graced any land at any time. Returning to England again, we find an additional number, each doing his own bit to advance medicine in one direction or another. Marshall Hall first demonstrated the reflex arc which brought him so much obliquy and derision in his own country that he could procure no hospital appointment and was able to secure publication of a paper with the greatest difficulty. John Jackson, a pioneer in the diagnosis of diseases of the nervous system and whose name is commemorated in the term Jacksonian epilepsy, was the first to establish the use of the ophthalmoscope in the diagnosis of diseases of the brain. Sir William Gowers, another of the founders of modern neurology, was the first to devote his attention to the minute anatomy of the nervous system, as well as to the clinical aspects of its diseases. Edmund Parkes, pioneer epidemiologist, was appointed to the first chair of Hygiene founded in England in 1860, and, in 1864, published his epoch-making, "Manual of Practical Hygiene." William Banting introduced the control of obesity by the general reduction of foods, particularly carbohydrates and fats in his "Letter on Corpulence" in 1863. F. W. Pavy deserves mention because, by disagreeing with Bernard loudly and in vitriolic terms, he did much to familiarize his English-speaking confreres with Bernard's views on the glycogenic function of the liver. He was apparently one of the few men in England who, despite the fact that there was a Banting as a contemporary, had any interest in diabetes mellitus.

While this paper's primary dealing is with the clinicians of this period, we must turn aside to make brief mention of certain medical contributions by their surgical confreres. Sir William Bowman contributed to the physiology of the kidney by first voicing, in 1842, the mechanical theory of the secretion of the urine by osmosis. James Y. Simpson first advocated the use of chloroform in anesthesia. Although this came the year after Morton, Jackson and Bigelow had launched ether, Simpson started a heated argument which continues to this day on this side of the waters. James Paget, that brilliant man whose written work had as much to do with medicine as with surgery, has had his name perpetuated in its association with two diseases, namely, eczema of the nipple, with subsequent mammary cancer, and osteitis deformans. The name of Jonathon Hutchinson is memorable to us on account of his description of the notched, peg-shaped incisor teeth in congenital syphilis, and his associating the teeth with the interstitial keratitis and eighth nerve deafness of this same condition,—"the Hutchinson Triad." Lastly, that dean of them all, Joseph Lister, is remembered for his establishment of the antiseptic principle in the practice of surgery which broadened the scope and lightened the load in every branch of medicine.

And now we turn back to the clinician, back to Guy's Hospital where our ramblings began, to consider Sir William Withey Gull, the nether end of our mid-nineteenth century spectrum. Gull, the son of a wharfinger of Colchester, England, was graduated from the University of London in 1846, and soon thereafter associated himself with Guy's Hospital, where he taught medicine and visited patients for the rest of his life. He was one of the greatest practitioners of his time, Napoleonic in appearance, witty, genial, attractive and a beautiful lecturer. However, popular as he was with students and patients, his later imperiousness and dogmatism nettled the "amour propre" of his confreres and made his professional relations not always happy. He dealt in diseases with the personal equation of the patient and would say, "Never forget that this is not a pneumonia, but a pneumonic man, who is your patient." In his therapeusis, he refused to bow a knee to the Baal of authority and he was a nihilist as regards the drenching with nauseous drugs, a sceptic toward all but a few, with expectant treatment his forte. "The road to medical education" he said "is through the Hunterian Museum, not through the apothecary's shop."

He was among the first to note the posterior

cord lesions in locomotor ataxia, described intermittent hemoglobinuria, myxedema and, with Sutton, the arteriocapillary fibrosis in chronic nephritis, a demonstration that the entity Bright's disease is something more than a local renal affection.

When at seventy-one he had an attack of hemiplegia with aphasia and made a slow recovery, he remarked, "One arrow has missed its mark, but there are more in the quiver." Two years later, a subsequent attack ended a long and useful career, in which he had fulfilled the dictum learned at his mother's knee, a nursery rhyme which to the end of his life he would often quote:

"If I were a tailor, I'd make it my pride,
The best of all tailors to be;
If I were a tinker, no tinker beside
Should mend an old kettle like me."

On a tablet to his memory in the chapel at Guy's are these words:

"As a teacher, few have exceeded him in the depth and accuracy of his knowledge, in the lucidity and terseness of his language and in the effect produced upon his hearers; as a physician, his almost instinctive insight, his unwearied patience, his exact method and ready resources and above all that hearty sympathy which seemed concentrated for the time on each patient, placed him in the highest rank in the noble band of British physicians."

These, then, are the historical facts offered in refutation of the pessimistic fictionalism quoted in an earlier paragraph of this discussion. Of true scientists, in the accepted sense of the word, in what we now broadly call the specialty of internal medicine, there were, to be sure, but few. But as outstanding observers and physicians in the highest sense, each of whom contributed his tithe to the sum total of useful medical knowledge and progress. I doubt whether any like period can show a group superior to those in that half century from Lydgate to Eliot, from Bright to Gull.

Cancer is diagnosed and treated as a co-operative effort in which the patient and the medical profession are closely related allies.

* * *

Cancer in plants can be produced regularly by treatment of plant tissue with plant growth hormones, such as indol acetic acid.

* * *

There is a distant chemical relationship between steroid hormones and the constituents of tar which cause cancer in animals.

* * *

Cancer tends to occur in those structures of the body which are known to be affected strongly by the steroid hormones, especially the tissues of the secondary sexual characters, breast, uterus, and prostate.

Severe Urticaria and Angio-Edema Resulting from Phenylbutazone (Butazolidin®)

By Samuel J. Levin, M.D.
Detroit, Michigan

THE INTRODUCTION of a new drug is frequently followed by reports of undesirable side effects, instances of toxicity and allergic reactions. Such is true in the case of Butazolidin,® a recent addition to the drugs used in the treatment of arthritis.[4] Several reports[3,4,5,6] indicate that a significant percentage of toxic reactions occur with this material. Several instances of agranulocytosis,[1,7] one case terminating fatally,[2] have been reported. The following case, we believe, is the first to be reported of severe urticaria and angio-edema resulting from the use of this drug.

Report of Case

Case 1.—The patient was a white man, aged twenty-four, who was hospitalized because of severe urticaria and angio-edema. These symptoms began two months before while receiving Butazolidin® for treatment of arthritis. His physician discontinued the drug and oral cortisone therapy was instituted. Several courses were given (exact dosage unknown). Moderate improvement resulted but the urticaria and angio-edema re-occurred with great severity each time the cortisone was discontinued.

When first seen two months after the onset of urticaria he was in severe distress despite treatment with many antihistaminics, other general measures and several courses of oral cortisone. The pruritus was of such severity that despite heavy sedation he had been unable to sleep for many nights. There was very widespread giant urticaria. His lips and eyelids were markedly edematous. Otherwise, physical, hematological and other examinations revealed no abnormalities. Repository adrenocorticotropic hormone (HP ACTHAR Gel®) was administered as follows: 60 units twice a day the first two days; 60 units once a day on third and fourth days, and 40 units on the fifth and sixth days.

The symptoms cleared up completely by the fifth day and several months later had not recurred.

(Continued on Page 1237)

From the Department of Medicine, Woman's Hospital, Detroit, Michigan.

Read at Annual Meeting of The Michigan Clinical Institute, Detroit, Michigan, March 13, 1953.

St. Luke's Hospital Clinico-Pathologic Conference

Edited by
J. C. Smith, M.D.
Saginaw, Michigan

Clinical Record

The patient was a white man, thirty-eight years old, who was well until five months before entering the hospital. At that time, he stated that he became "stomach conscious" because of a vague sensation of indigestion. This complaint continued for three months when pain developed in the mid-abdomen. The pain tended to be constant and was of moderate severity and "gnawing" character, and occasionally radiated through the abdomen to the back. There was no relation of severity to ingestion of food at the onset. Later, the pain became sharply localized in the mid-epigastrium and increased severity was noted one to two hours after meals. Relief was then obtained by eating, by taking antacid tablets, and by drinking milk. Radiographic examination elsewhere was stated to reveal an ulcer of the duodenum. The patient was treated with special diet for the next three weeks and there was no relief.

The patient was then admitted to St. Luke's Hospital for radiographic studies. The chest x-ray was normal. With the swallowing of Barium, the esophagus appeared normal and the stomach revealed a coarse and irregular mucosa, most marked in the distal third. Fluoroscopic examination revealed all palpable areas to be flexible and no interruption of peristaltic waves was seen. However, a collection of Barium, 6 mm. in diameter, was identified on the lesser curvature, just beyond the angularis incisura. This was interpreted as a superficial ulcer crater, and was stated to be apparently benign. There was no delay of gastroduodenal evacuation, no deformity of the duodenal bulb, and no gastric retention after five hours.

The patient was given Banthine and a Sippy diet for two weeks in the hospital, and then for two weeks at home. Radiographic re-examination of the stomach was then undertaken. It was noted that the ulcer had slightly enlarged and now appeared to measure 1 cm. in diameter. In addition, there was evidence of excess tissue on either side of the lesion indicating some extension into the lumen. It was stated that serious consideration should be given to the possibility that the lesion be malignant.

One week later, the patient entered the hospital. The symptoms had continued except for the two days before admission when the patient felt well. During the entire illness, there had been no nausea, vomiting, change in color of the stool, or noticeable reduction of appetite. However, during the three months before admission, there had been a weight loss of eighteen to twenty pounds.

The past history and review of systems were not contributory. There had been no known gastric disease in other members of the patient's family.

Physical examination revealed a well-developed and well-nourished white man of thirty-eight years in no distress. The oral temperature was 99.2° F., respirations 20, pulse 86, and blood pressure 177/98 mm. Hg. The head and neck were not remarkable. The thyroid was not enlarged and there was no enlargement of cervical or supraclavicular lymph nodes. The chest was symmetrical and the lungs were clear to auscultation and percussion. Examination of the heart revealed a normal sinus rhythm and no murmurs or enlargement. The abdomen was flat and soft. Palpation revealed slight tenderness in the mid-epigastrium. There were no masses and the liver, spleen, and kidneys were not felt. The genitalia and extremities were not remarkable.

Hematologic examination revealed 14 gm. of hemoglobin per 100 cc. of blood. There were 4,580,000 erythrocytes and 5,600 leukocytes per cu. mm. Differential count of 100 cells revealed 59 segmented granulocytes, 35 lymphocytes, 4 eosinophils, and 2 monocytes. An operation was performed on the second hospital day.

Discussion

Dr. H. M. Bishop: We have here a rather clear clinical record that indicates a single lesion in the stomach of a relatively young man. The features of interest include a state of well being until five months before operation, and then a steadily progressive illness characterized by pain, weight loss, and radiographic evidence of a mucosal lesion of the gastric wall. The pain was first described as being in the mid-abdomen, and then specifically in the mid-epigastrium and of focal nature, with occasional radiation to the back. In at least one instance, the pain was described as "gnawing" in character. It is also stated that some relief was obtained by the ingestion of food, and that this relief occurred from one to two hours after eating. However, the period during which relief was so obtained appears from the record to be only temporary, and it is to be emphasized that the essential feature of the pain was its constancy. Furthermore, the pain persists during and after treatment with Banthine and a Sippy diet.

The second feature of interest is the rather pronounced loss of weight during this short illness of only five months' duration. There was apparently no particular reduction of appetite and I shall assume from this that the loss of weight represents the systemic effect of a progressive lesion. I should like also to comment here that the absence of anemia in the presence of this constant pain and marked loss of weight further attests to the rapidity with which this lesion progresses. I must say that the combination of all of these factors must have given this patient's physician considerable concern.

In the face of these serious clinical signs, I would expect the radiographic studies to clearly demonstrate a large lesion of the gastric wall. Instead of this, we find only a small mucosal defect that at no time exceeded 1 cm. in diameter. The wall is flexible, there is no interruption of peristalsis, no stenosis in the pyloric region, and no distortion of contour except for this surprisingly small mucosal defect. There does indeed seem to be discrepancy between the paucity of roentgenographic findings and the rapid progression of grave clinical signs.

I believe it is apparent from this clinical record that the main evaluation must be the differentiation of ulcer from malignant neoplasms of the stomach. Several features of this illness are suggestive of peptic ulcer. The lesion appears to be located in the distal third of the gastric wall on the lesser curvature. It is, of course, in this region that peptic ulcer is particularly common. The x-ray studies disclose only a small and constant mucosal niche in a flexible wall that appears otherwise not unusual. At one time, relief of pain was obtained by the ingestion of food and antacid substances. It has been frequently said that with duodenal ulcer, there is,

after the ingestion of food, relief that is followed by pain. In contrast, the ingestion of food in the case of gastric ulcer is followed by pain after which there is relief. In both cases, these cycles recur with extraordinary regularity. The clinical record of this man manifests such a cycle, with pain coming on as soon as one hour after the ingestion of food. I must add, however, that in my experience, this so-called dictum has not proved reliable. The pain was stated to be of "gnawing" character and was occasionally referred to the back. Extension of gastric ulcer through the wall with fixation onto pancreas and involvement of parapancreatic nerves often accounts for such pain. In this case, fixation was not demonstrated, and it is to be emphasized that involvement of nerves in the wall of the stomach by an ulcer may also produce referral of pain to the back.

Now, although all of these considerations may be held in support of a diagnosis of ulcer, there are several characteristic historical data that are missing. These include a history of gastric distress prior to the onset of this illness five months ago. Most patients with ulcer who are as seriously sick as this man, have clinical disturbances of several years' duration. Furthermore, the usual manifestation of ulcer is pain that is not only of long duration, but is also of distinctly cyclic nature throughout its course. Lastly, a loss of twenty pounds of weight in a period of five months is most unusual in an ulcer patient unless there is a high degree of pyloric stenosis. Therefore, I shall dismiss peptic ulcer as the most likely diagnosis in this case.

Even though the patient is only thirty-eight years of age, and even though the gastric lesion appears to be small on the x-rays, there are several facets of this illness that are most suggestive of malignant gastric neoplasm. I am struck first with the constancy of this pain that persists even through periods of careful dietary management. There is also the pronounced loss of weight in the absence of anorexia and stenosis of the pylorus. These serious complaints arise rather abruptly in a young man who has been previously well. It may be assumed that there has not yet been time for the development of anemia, and its absence does not strongly militate against the diagnosis of malignancy. The small size of the lesion on the x-rays, and particularly the unaltered flexibility of the gastric wall cause me to hesitate. However, we are looking at shadows, not tissue, and the lesion may be considerably larger than our interpretation indicates. For these reasons, I do not believe that the relatively young age of the patient, the absence of anemia, or the small size of the lesion as demonstrated by x-rays, necessarily cast disfavor on the diagnosis of malignant tumor of the stomach. Thus, on the basis of a demonstrated gastric lesion associated with constant pain and with relentlessly progressive loss of weight, of short duration, arising in a previously well patient, I shall make the diagnosis of primary malignant tumor of the stomach.

Malignant lesions of the stomach may be roughly divided into carcinomas and sarcomas. It is, of course, well known that sarcomas tend to occur in a younger age group than the epithelial tumors. Most mesothelial tumors of the stomach are lymphosarcomas. Hodgkin's disease and reticulum cell sarcoma are less common. On the basis of the age of this patient, I am very much tempted to make a diagnosis of gastric sarcoma. However, holding to the factor of statistical safety which strongly favors the malignant epithelial tumors, I shall make the specific diagnosis of adenocarcinoma of the stomach.

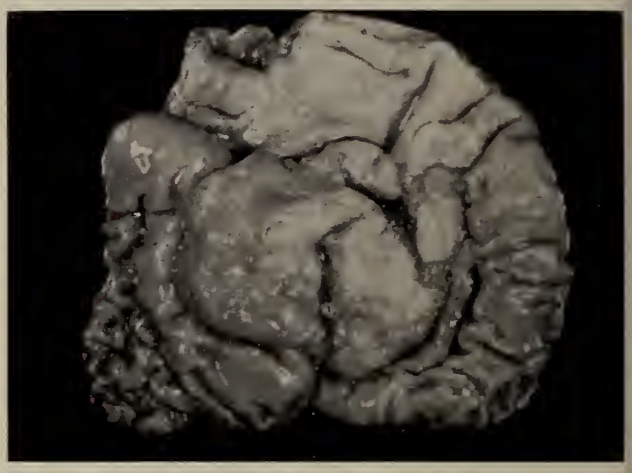


Fig. 1. Stomach showing ulcerated reticulum cell sarcoma.

Dr. J. C. Smith: After studying this patient with a variety of radiographic techniques, Dr. Caumartin, does your opinion coincide with that of Dr. Bishop?

Dr. H. T. Caumartin: Yes, it does. I was also impressed by the disparity between the clinical and roentgenographic findings. Ordinarily, there is better correlation between these factors. There is one feature that should be mentioned. Peptic ulcers that are subjected to strict dietary treatment characteristically change within a short period, so that the crater may disappear after as little as two weeks. This, of course, does not hold for carcinoma. I attach significance to this observation and from it derive support for a diagnosis of malignant tumor in this patient.

Clinical Diagnosis Of Dr. Bishop

Adenocarcinoma of stomach.

Anatomic Diagnoses

Reticulum cell sarcoma of stomach.

Lymph nodes, no pathologic diagnosis (11 of 11 sections).

Dr. J. C. Smith: The specimen consisted of a stomach in which a large ulcerated and raised lesion of roughly round outline replaced the entire wall. This tumor measured 6 cm. in greatest diameter (Fig. 1). The cut surface was firm and uniformly pale pinkish gray. Sections disclosed large cells with abundant cytoplasm and large moderately basophilic, round nuclei with chromatin dispersed in coarse clumps (Fig. 2).

Mitotic figures were scarce. Special stains demonstrated an abundance of reticulum fibers closely associated with the tumor cells. Secondary tumor was not identified in eleven sections of regional lymph nodes.

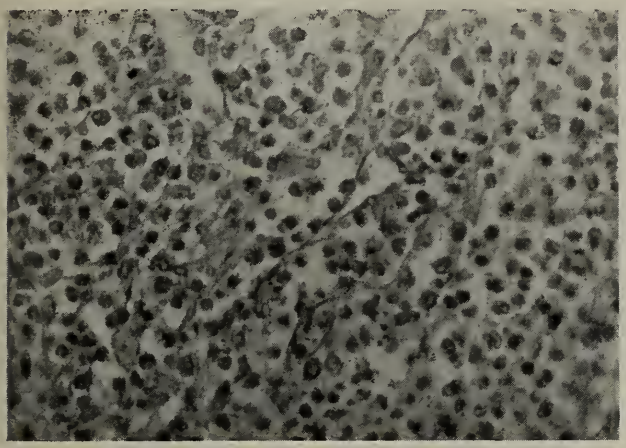


Fig. 2. Microsection of reticulum cell sarcoma.

Some authorities hold that reticulum cell sarcoma is but one type of lymphosarcoma. Others believe that this neoplasm is separate and apart from the group of tumors known collectively as lymphosarcoma. Jackson and Parker[1] hold to the latter view for several reasons. These include morphologically distinct cells forming the reticulum cell sarcoma, close association of cells with an abundance of delicate reticulum fibrils, and the fact that reticulum cell sarcoma arises in bone as a primary tumor whereas lymphosarcoma does not. They also point out that leukemia, and occurrence under the age of twenty years, are not seen in reticulum cell sarcoma.

In an analysis of twenty-eight cases with autopsy, it was found that the most common primary site was in retroperitoneal lymph nodes, and the next most common site was the gastrointestinal tract. More reticulum cell sarcomas arose in the stomach than from any other portion of the gastrointestinal tract. A tabulation of ninety-eight cases revealed the most frequent signs and symptoms to include loss of weight, pain, anorexia, dyspnea, and cough. Accurate diagnosis depends on biopsy. Jackson and Parker[1] emphasize that treatment consists, for the most part, in the use of high voltage x-rays. In eighty-eight cases, forty-six lived less than one year from onset, thirty-six between one and five years, five from five to ten years, and only one was alive after ten years. Thus, the outlook for these cases is exceedingly poor.

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HYPERTHYROIDISM

(Continued from Page 1193)

thyroidism in the absence of serious complications in patients with relatively low basal metabolic rate (plus 35 or less).

The antithyroid drugs are an important contribution to hyperthyroid therapy in that bad risk patients with high basal metabolic rate, cardiac and other complicating diseases may be made euthyroid before resection of the gland is undertaken. The mortality may thereby be reduced to less than 1 per cent in these patients.

Radio-active isotopes (I^{131}) are ideal in patients with diffuse toxic goiter, recurrent hyperthyroidism and in hyperplastic goiter which fails to respond to other methods of treatment. Because of the possible carcinogenic effect, this type of treatment should be limited, at the present time, to older patients, and to patients of any age in whom the risk of operation outweighs that of the possible chance of cancer. The high dosage necessary in toxic nodular goiters and the failure of the isotope to reduce the size of the gland importantly, limits its value in this type of hyperthyroidism.

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Michigan State Medical Society Past Presidents 1894-1902



More than half of Michigan's population still lived on the farm in 1894-1902, but her cities were growing. Winter wheat was the leading grain crop, using some 1,750,000 acres—more than twice today's acreage.

Entering the wondrous Twentieth Century, Michigan was amazed that the Olds Motor Works in Lansing could produce 1,400 automobiles in one year. Detroit, while proud of its first mile of cement highway, paid little attention to a young mechanic named Henry Ford who dreamed of organizing his own automobile company. And, besides, who wanted to bother with gas buggies when Detroit had a new American League baseball club?

The fact that almost 10,000 students were enrolled in Michigan colleges caused comment, but the Spanish-American War was much bigger news. Michigan supplied five regiments, forcing a reorganization of her National Guard in 1900. That same war produced a vigorous hero who became Vice President in March, 1901, and President six months later when McKinley was assassinated: The First Roosevelt Era was at hand.

(MSMS past presidents from 1903 to 1911 will be featured in an early issue.)

High Point of the Society Year

The Eighty-Eighth Annual Session of the Michigan State Medical Society was larger in attendance (3,266) than any held previously in Grand Rapids. Our Society was honored by having as guests the president of the AMA, Edward J. McCormick, M.D., the senior senator from Michigan, Homer Ferguson, and his wife, Mrs. Ferguson. Both men gave addresses on Officers' Night.

Several of our neighboring states were represented by members of their official families: Paul A. Davis, M.D., Akron, president of the Ohio State Medical Society and Mrs. Davis; Arkell M. Vaughn, M.D., Chicago, president-elect of the Illinois State Medical Society; W. K. Howard, M.D., Hammond, president-elect, and James Waggoner, Indianapolis, executive secretary, of the Indiana State Medical Society. Glenn Sawyer, M.D., Toronto, secretary of the Ontario Medical Society, and Earl Thayer, Madison, executive director of public information, of the Medical Society of the State of Wisconsin, were welcome guests. U. R. Bryner, M.D., of Salt Lake City, Utah, president of the American Academy of General Practice, also honored us by his presence in Grand Rapids.

The House of Delegates met morning, afternoon, and evening, Monday and Tuesday and completed a great deal of work. Several knotty problems were discussed and settled in a satisfactory manner.

Wednesday, Thursday, and Friday were devoted to scientific programs, and all branches of medicine were represented by outstanding speakers.

Our Woman's Auxiliary was well represented at its own annual convention. Mrs. W. S. Stinson of Bay City was installed as president, Mrs. William Mackersie, Detroit, retiring after a successful year. The Woman's Auxiliary continues to be a great help.

The Michigan State Medical Assistants Society had a very successful meeting.

Those of you who were in Grand Rapids will agree that the exhibitors outdid any of their previous efforts in the beauty and interest of the 149 displays.

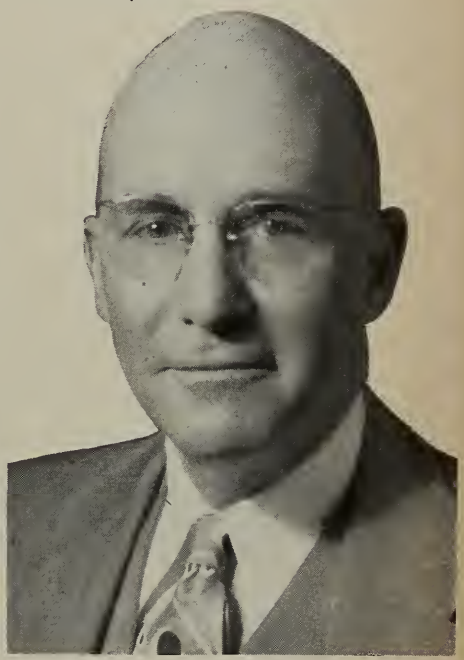
Credit is due the Press Relations Committee and our public relations counsel, Mr. Hugh W. Brenneman and his associates for the good newspaper and television coverage given the 1953 session.

Last, but not least, recognition should be given to Executive Director William J. Burns and his efficient and devoted staff for the smooth and efficient manner in which the convention was run. A vast amount of work and untold attention to detail are necessarily incurred in such a large undertaking. Thanks are here given to the executive office staff for its part in making the Eighty-Eighth Annual Session a memorable success.

L. W. Hull

President, Michigan State Medical Society

President's



Message

Editorial

THE FEDERAL CONGRESS

FOR THE FIRST TIME in many years (is it twenty?), the Federal Congress is not in session in Washington! Many of the Senators and Representatives are at home doing the traditional "looking after their fences." During these Congressional "vacations," the men like to and should consult with their constituents who have suggestions to make or criticisms on the way the world is running. We know from personal experience that the Congressmen are willing and eager to talk with the home people not only about matters in general, but also about the specific things these people are interested in, so far as national legislation is concerned.

While the members of Congress are home, it is a wonderful time to invite them to our county and district medical meetings—even the staff conferences of our hospitals, if we could promise a good attendance. There are many topics upon which they could make interesting reports; and they would be glad to have the opportunity. Such a report furnishes information upon which to base an intimate talk with the lawmaker who must produce the legislation in which we are especially interested, or block certain legislative programs which we think are harmful. Each individual doctor of medicine probably has some pet program which he could sponsor, if given the opportunity. If you do not know your Congressman personally, a group meeting is a grand place to ask questions or make suggestions.

In the recent months, we have mentioned several national legislative needs, any or all of which are worthy of action. This season is the first time for as long as we can remember when such a chance for personal conferences has been presented. We urge every medical group and the individual members to speak up. The men from Washington will listen and will be glad to. Sometimes they will even promise to attempt to do something definite, especially when that something is not a selfish project but is a constructive benefit to the whole people.

THE PRESIDENT-ELECT

AT THE Eighty-Eighth Annual Session of the Michigan State Medical Society, held in Grand Rapids, September 21 to 25, 1953, the House of Delegates chose as our President-Elect, Robert H. Baker, M.D., of Pontiac, Michigan. Dr. Baker was born in Bay City, April 10, 1892. His father was Charles H. Baker, M.D., a Councilor and President of the Michigan State Medical Society in 1919.



R. H. Baker, M.D.

As a matter of historical interest to our members, this is the fifth time a son has followed his father as President of the Michigan State Medical Society. His predecessors were C. M. Stockwell, M.D., Port Huron, the first President in 1866, and his son Charles B. Stockwell, M.D., also of Port Huron, President in 1906; Richard Inglis, M.D., of Detroit, President in 1869, and his son, David Inglis, M.D., Detroit, President in 1905; Leartus Connor, M.D., of Detroit, President in 1901, and his son, Guy L. Connor, M.D., President in 1925; J. H. Carstens, M.D., Detroit, President in 1909, and his son, Henry R. Carstens, M.D., President in 1941.

Dr. Baker was graduated from the Bay City High School and entered the University of Michigan at seventeen. He received the A.B. degree in 1913 and M.D. in 1918. He was on Dr. A. S. Warthin's pathology staff and was elected to Sigma Xi in his senior year. He served a rotating surgical internship at the University Hospital in 1916-1917, and was demonstrator in Surgery in 1917-1918. He was commissioned First Lieutenant in the Medical Corps, U.S.A., February 1, 1918, and attended the Army Medical School in Washington, March 1 to June 30, 1918, graduating in orthopedic surgery.

In May, 1919, Dr. Baker returned to the University Hospital as instructor in surgery and completed his graduate training in surgery, July 1, 1920. He then entered private practice in Pontiac, specializing in general surgery.

Dr. Baker was active in organizing the medical staff at Pontiac General Hospital. He also served on the building committee resulting in the present structure. Dr. Baker served the Oakland County Medical Society as secretary, treasurer, and president. He also served on the Executive Committee and for some years on the Medical-Legal and Economic Committees. He was a charter member of the Kiwanis Club and Torch Club, having served as President of Torch.

Dr. Baker has been a life Fellow of the American College of Surgeons since 1927. He has been repeatedly a Delegate from Oakland County Medical Society to the House of Delegates of the Michigan State Medical Society, Vice Speaker three years, and Speaker four years.

In 1918, Dr. Baker married Helen C. Crane, R.N. They have two children, Donald and Gail, both married. There are four grand-daughters. Dr. Baker's hobbies are travel, photography, music, home woodshop, sailing, and outdoor sports. He is the author of several scientific papers: "Condyloma of the Bladder," "Treatment of Hare-lip and Cleft Palate," "Cylindroma of the Tongue," and "Compression Fracture of the Spine."

OTHER ELECTIONS

THE HOUSE of Delegates, in addition to choosing a President-Elect and installing L. W. Hull, M.D., of Detroit, as President, chose the following Councilors: Wm. L. LeFevre, M.D., Muskegon, as Councilor of the Eleventh District, succeeding Charles A. Paukstis, M.D., Benj. T. Montgomery, M.D., Sault Ste. Marie, Councilor of the Twelfth District to succeed A. H. Miller, M.D.; William S. Jones, M.D., Menominee, to succeed himself as Councilor of the Thirteenth District; and W. B. Harm, M.D., of Detroit to succeed himself as Councilor of the Seventeenth District.

William M. LeFevre, M.D.

William M. LeFevre, M.D., of Muskegon, was elected Councilor for the Eleventh District of the Michigan State Medical Society. Dr. LeFevre was born in Muskegon December 5, 1896, the son of a physician, a former Councilor and President of the Michigan State Medical Society. He was graduated from the University of Michigan, A.B., 1919, and M.D., 1923, interned in the Memorial Hospital, Philadelphia, 1923-24. Since 1924, he has been in the private practice of internal medicine in his present office, 189 W. Western, Muskegon; is a Fellow of the American College of Physicians, 1930; American Diabetes Association, 1941; Michigan Diabetes Association, President since 1950. He was President of the Muskegon



Wm. M. LeFevre, M.D.



B. T. Montgomery, M.D.

County Medical Society in 1944, and Secretary from 1945 to 1952. Fraternally, Dr. LeFevre is a member of the Century Club, the B.P.O.E. and the Muskegon Country Club. He is a member of the Red Cross, and was chairman of the Muskegon chapter, 1941-1949.

Dr. LeFevre is a consultant in the Department of Internal Medicine, to both Hackley and Mercy Hospitals; has taken postgraduate courses at the University of Michigan, Barnes Hospital, Massachusetts General Hospital, Cook County, and short courses. He has published five scientific papers, several in The Journal MSMS, and one pamphlet on "Instructions for the Diabetic Patient."

Benjamin T. Montgomery, M.D.

Benjamin T. Montgomery, M.D., was born in Flint, Michigan, April 24, 1895, studied at the University of Michigan 1914 to 1916, and graduated at Wayne University, M.D. in 1923. He interned at Staines Hospital in 1923-1924, practiced in Detroit 1926-1927, and has practiced at Sault Ste. Marie since 1927. He was President of the Chippewa County Medical Society in 1941, a delegate to the Michigan State Medical Society, 1943-1953, President of the Upper Peninsula Medical Society in 1947 and is a member of the American Medical Association. He is a member of all Masonic bodies including the Knights Templar and Consistories, and is now President of the Sault Shrine Club. Dr. Montgomery, a staff member of the War Hemorial Hospital at the Sault, was Chief of Staff in 1941. He was elected as

Councilor of the Twelfth District of the Michigan State Medical Society at Grand Rapids.

J. E. Livesay, M.D., Flint, was elected Speaker of MSMS House of Delegates, and Kenneth H. Johnson, M.D., of Lansing, Vice Speaker.



J. E. Livesay, M.D.



K. H. Johnson, M.D.

Jackson Edward Livesay, M.D.

Jackson E. Livesay, M.D., newly elected Speaker of the House of Delegates, practices at Flint, Michigan. He was born in Montana, January 13, 1914, and received his early education there. He received his B.A. degree at Cornell College (Iowa), and his M.D. degree at the University of Iowa, 1938. He interned at Hurley Hospital, Flint, Michigan, took his residency at Hurley and Jefferson Medical College in Philadelphia, and postgraduate work at the University of Michigan and at Jefferson. He is an Elk, a member of the Chamber of Commerce and of the Mott Foundation. His practice is limited to radiology. He is radiologist to St. Joseph Hospital, Flint, and consultant at A. C. Spark Plug Hospital, Flint.

Kenneth Holbrook Johnson, M.D.

Kenneth Holbrook Johnson, M.D., of Lansing, Michigan, was elected Vice Speaker of the House of Delegates. He was born in Lansing, July 16, 1908, attended Michigan State College two years, and graduated in Medicine at the University of Michigan in 1930. He interned and had his residency at Edw. W. Sparrow Hospital in Lansing. He served in the Air Corps, from May 15, 1942, to November, 1945, and overseas in Australia and New Guinea. He was a Captain and Flight Surgeon with a special rating as radiologist. He is a member of the Lions Club, Chamber of Commerce, has served on the Board of the Family Service Agency and on several committees of the Michigan State Medical Society.

Wm. A. Hyland, M.D., of Grand Rapids, Ralph A. Johnson, M.D., of Detroit, and J. S. DeTar, M.D., of Milan, were elected to succeed themselves in the House of Delegates of the American Medical Association. Alternate delegates elected were Geo. W. Slagle, M.D., Battle Creek; Warren W. Babcock, M.D., Detroit; and O. J. Johnson, M.D., of Bay City.

The Council, at its organizational meeting, Friday, September 25, 1953, re-elected William Bromme, M.D., Detroit, as Chairman; H. B. Zemmer, M.D., Lapeer, was re-elected Vice Chairman; W. S. Jones, M.D., Menominee, Chairman of the Finance Committee; D. Bruce Wiley, M. D., Utica, Chairman of County Societies Committee; and G. B. Saltenstall, M.D., Charlevoix, Chairman of the Publication Committee.

MICHIGAN MEDICAL SERVICE DIRECTORS

THE MEMBERS of Michigan Medical Service elected the following Directors: *(For three years)* L. Fernald Foster, M.D., Bay City; Ralph N. Long, Detroit; William A. Hyland, M.D., Grand Rapids; W. H. Huron, M.D., Iron Mountain; Grover C. Penberthy, M.D., Detroit; Ellery A. Oakes, M.D., Manistee; Philip Riley, M.D., Jackson, D. W. Thorup, M.D., Benton Harbor; James B. Blodgett, M.D., Detroit. *(For two years)* Geo. W. Slagle, M.D., Battle Creek; Ralph A. Johnson, M.D., Detroit. *(For one year)* Joseph P. Peer, M.D., St. Clair; and D. Bruce Wiley, M.D., Utica. Also elected to represent Michigan Hospital Association were: Kenneth B. Babcock, M.D., Detroit, and A. C. Kerlikowske, M.D., Ann Arbor.

A PROBLEM FOR MICHIGAN PHYSICIANS

THE ANNUAL problem of obtaining a sufficient number of well-qualified young physicians to fill the vacancies available in Michigan hospitals approved for intern and resident training is of great importance to the medical profession of our State

The State that fails to attract and hold its quota of interns and residents is soon faced with a shortage of physicians capable of bringing modern medicine to its people. Cultists and those with

inadequate training rush in to fill the medical needs of the people.

Michigan has thirty-four hospitals approved for intern and resident training. These institutions have 555 internships to be filled each year. Hospitals that are a part of, or affiliated with, medical schools have little trouble in obtaining a sufficient number of promising interns and residents, but those not connected with teaching institutions are not so fortunate. The successful operation of an intern and resident training program in these institutions is complicated by many factors: The hospital staff is loosely integrated and made up of many competing physicians. Each physician is an individualist in his method of treating the sick. The practices which have served him well for years are difficult to discard and habit often determines his methods of procedure.

The patients receiving medical care in hospitals today are classified for the most part as private patients. Each has his or her own physician. Both the patient and the attending physician at times resent necessary laboratory procedures and other services by interns and residents, nurses and laboratory assistants. Long before the attending physician has accepted the intern or resident as a working partner in his hospital practice, his patients usually are pleased with the young physician's services. They find that they have two physicians in attendance and loudly praise the care they are receiving.

The intern is smart. When he begins his service in the hospital approved for intern training he knows more about medicine than he will ever know again in his professional life. He is filled with scientific knowledge pertaining to medicine, but he usually is totally deficient in knowledge of the art of practice. He is outspoken, critical, and sure of his ability. Occasionally, by some unknown process of cerebration, he will arrive at a correct diagnosis and greatly irritate and embarrass the attending physician. He will inform everyone that his medical school is superior to all others, and that its faculty is composed of the greatest teachers in the country. The methods of treatment taught in his school are the only modern ones. These things endear him to the hospital staff members and to the group of interns and residents from other schools! (This description of an intern would accurately describe most of us when we first embarked upon our graduate training.)

In spite of many points of friction between the intern and the attending physician, it is possible to establish and maintain a good intern and resident training program in most of our hospitals approved for this important work. But in order to do so the physician must sacrifice some of his time from his busy practice. Daily hospital visits should be made by the attending physician accompanied by the interns and residents. The tentative diagnosis, the physical condition of the patient, previous and present treatments, prognosis and plan of procedure in the care of the patient should be discussed fully and frankly with the young physicians. These discussions, of course, should not be held in the presence of patients.

Within a short time a mutual understanding as to each physician's duties will be established, as well as mutual respect for each other. If the intern and resident feel that they are profiting by the experience of the older physician, they, usually, are very willing to serve the patients.

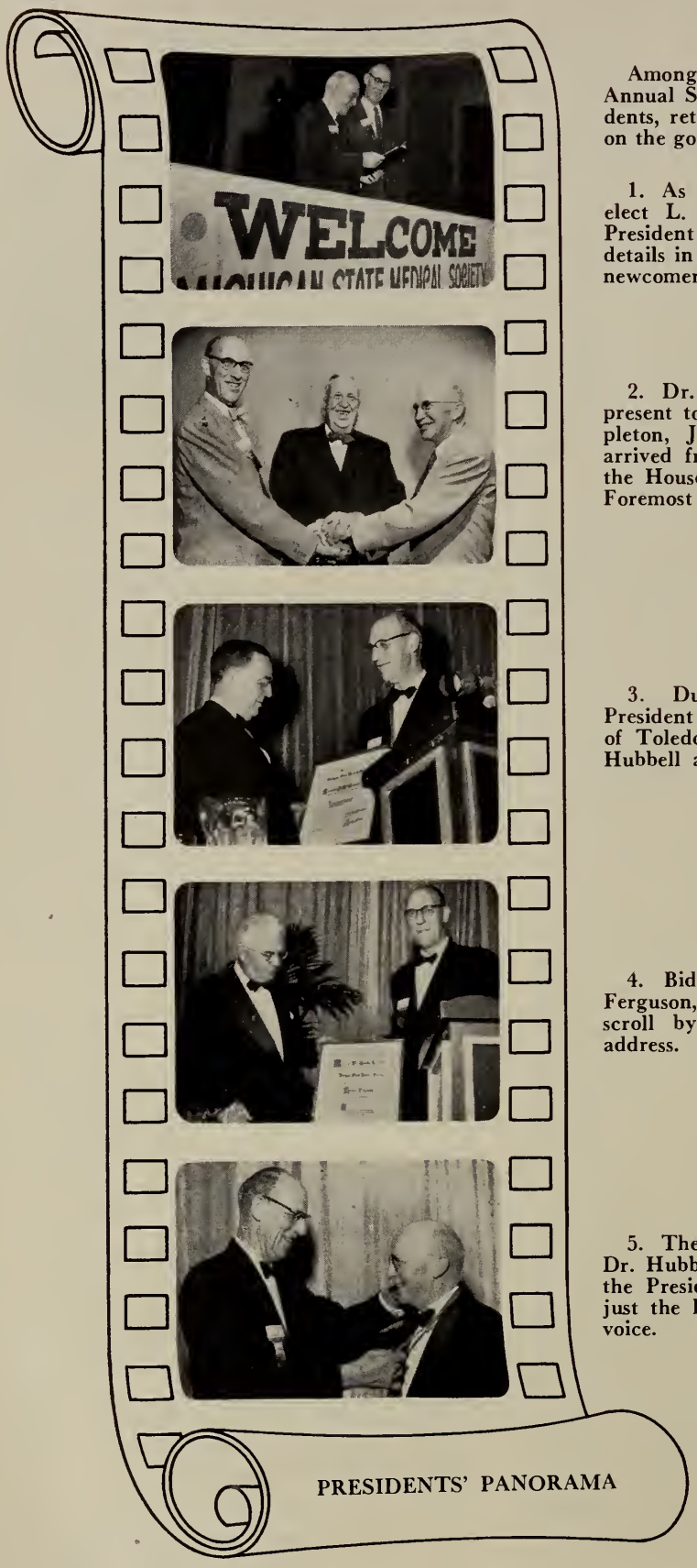
In some hospitals in our State the educational program is directed by members of a committee on intern and resident training. There can be no objection to such a committee, but every physician practicing in a hospital has some contribution to make in the training of these young men and women. Some can give much more than others, but the esprit de corps is much better when each physician is contributing something to the training program.

Michigan doctors in the thirty-five hospitals in this State approved for intern and resident training have an opportunity to help young physicians in their graduate work. The attending physician will be a better medical servant if he comes in contact daily with these young interns and residents. His medical care of patients in the hospital will improve and he will establish friendships with many young physicians who later will be his colleagues. The hospitals will be benefited by rendering a better quality of service to the sick, and the patients will be most grateful to their attending physician and the graduate staff for excellent service during their stay in the hospital.

H. H. Cummings, M.D.

Chairman, Committee on Postgraduate Medical Education, MSMS

MSMS IN THE SPOTLIGHT



PRESIDENTS' PANORAMA

Among the busiest men at the 88th Annual Session were the MSMS Presidents, retiring and incoming, who were on the go morning to evening.

1. As the session opened, President-elect L. W. Hull, M.D. (left), and President R. J. Hubbell, M.D., checked details in between times as they greeted newcomers on the Pantlind balcony.

2. Dr. Hubbell and Dr. Hull were present to congratulate William J. Stapleton, Jr., M.D. (center), when he arrived from Detroit to be saluted by the House of Delegates as "Michigan's Foremost Family Physician" of 1953.

3. During Officers Night, AMA President Edward J. McCormick, M.D., of Toledo, received a scroll from Dr. Hubbell after addressing the assembly.

4. Biddle Lecturer, Senator Homer Ferguson, was also presented with a scroll by Dr. Hubbell following his address.

5. Then, his year of service ended, Dr. Hubbell passed his badge of office, the President's Key, to Dr. Hull with just the hint of a sigh of relief in his voice.

88th Annual Session Roundup

NEW ATTENDANCE RECORD FOR GRAND RAPIDS

"Outstanding" was the most-used adjective for the 88th Annual Session. One strong point in evidence was the registration, which totaled 3,266 for the week—a record attendance for Grand Rapids that crowded the all-time high in Detroit last year.

Altogether 1,704 doctors of medicine were present for the three days of scientific presentations by 26 prominent guest essayists from every section of the nation. In addition, M.D.s and their patients and other friends had the opportunity of hearing AMA President Edward J. McCormick, M.D., of Toledo, Ohio, and U. S. Senator Homer Ferguson, who appeared as Biddle Lecturer with an authoritative and up-to-the-minute review of American foreign policy and the role of the United States in world affairs.

ANNUAL SESSIONS "FIRSTS"

Among the "firsts" which appeared in conjunction with the 1953 Annual Session was the first General Practice Day, the first meeting of the Michigan Chapter, American College of Surgeons, the first Beaumont Lecture, and the selection of the first writer to receive the new MSMS Award for Excellence in Medical Reporting.

The first Beaumont Lecture, a memorial to William Beaumont, M.D., the pioneer Michigan physician famed for his research in human digestion, was given by J. A. Bargen, M.D., Rochester, Minnesota, Chief of the Department of Gastroenterology at Mayo Clinic.



A Successful Year

William Bromme, M.D. *(right)*, Detroit, Chairman of The Council, MSMS, played a major part in the planning and direction of the successful 88th Annual Session. Here he is pictured in smiling action presenting a scroll and the Past President's Pin of Appreciation to R. J. Hubbell, M.D., on Officers' Night.

Selected by The Council to receive the first in a series of periodic awards for excellence in reporting in the field of medicine was Jack Pickering, *Detroit Times* science writer, who will be presented with a scroll during the 1954 Michigan Clinical Institute next March.

MICHIGAN'S FOREMOST

While Annual Session highpoints were numerous, two events which attracted the greatest public attention were the selection of William J. Staple-

NEW MSMS ATTENDANCE MARK FOR GRAND RAPIDS

Here's a breakdown of the record registration for the 88th Annual Session of MSMS in Grand Rapids September 23-25:

Doctors of Medicine	1,704
Woman's Auxiliary Members	269
Medical Assistants Members	246
Guests (including nurses)	542
Exhibitors	505
TOTAL	3,266

The largest registration in Grand Rapids previously was 2,901 in 1951. The 1953 Grand Rapids attendance crowded the all-time record of 3,605, set at the 1952 Annual Session in Detroit.



House of Delegates Tackles Problems

Discussion and debate on major problems extended far into the night as members of the House of Delegates conducted annual MSMS business. Interest was so intense that two meetings drew 100 per cent attendance, while the record at others was nearly perfect. At the rostrum is Vice-Speaker J. E. Livesay, M.D., Flint, later elected Speaker. Seated to his left is President-elect R. H. Baker, M.D., Pontiac, who was still Speaker when this action photo was taken; Executive Assistant Helen Schulte; Secretary L. Fernald Foster, M.D., Bay City. Introducing a resolution at the microphone *(far left)* is O. K. Engelke, M.D., Ann Arbor. Inserted *(upper right)* is portrait of Dr. Baker.



The Golden Years

Six of the twenty new members of the MSMS "Fifty-Year Club" were present to be honored for reaching the half-century mark in their medical practice. To most the honor was just another milestone in their active daily service to the public. Preparing to receive awards from L. Fernald Foster, M.D. *(left),* Bay City, MSMS Secretary, *(left to right)* are: A. J. DeNike, M.D., Detroit; C. B. Fulkerson, M.D., Kalamazoo; Robert Beattie, M.D., Detroit, and J. D. Brook, M.D., Grandville. Inset shows A. B. Hewes, M.D., Adrian, and W. H. Honor, M.D., Wyandotte, after the ceremony.



MSMS Makes Headlines

In the bustling Press Room, reporters from major newspapers and wire services as well as radio, and television outlets produced thousands of words on the 88th Annual Session. Here Dale Nouse *(right), Detroit Free Press* science writer, interviews Blair Holcomb, M.D., *(second from left),* Portland, Oregon, guest speaker. Listening are William M. LeFevre, M.D., *(left),* Muskegon, MSMS Councilor and Dr. Holcomb's host, and P. W. Kniskern, M.D., Grand Rapids, Scientific Press Committee member.



Club Gets Medical Facts

Five Grand Rapids service clubs invited doctors of medicine to speak on current medical topics during the MSMS Annual Session. In addition, MSMS representatives appeared on a number of radio and television programs. Answering questions after a talk before the Exchange Club is Joseph G. Molner, M.D., *(right)* Detroit Health Commissioner. With him are Carl W. Uthoff, M.D., *(left),* Grand Rapids, chairman of the Exchange Club program, and Winston G. Prothro, M.D., Director of Grand Rapids City Health Department.

ton, Jr., M.D., Detroit, as Michigan's Foremost Family Physician of 1953 by the House of Delegates, and the admission of twenty doctors of medicine to the MSMS 50-Year Club. Since its inauguration in 1947, the exclusive organization for M.D.s who have reached the half-century mark in medical practice has received 202 members.

Named to 50-Year Club membership in Grand Rapids were the following: Robert Beattie, M.D., Franz Blumenthal, M.D., A. J. DeNike, M.D., John C. Dodds, M.D., B. U. Estabrook, M.D., J. E. Gleason, M.D., Charles W. Knaggs, M.D., Allan McDonald, M.D., W. R. Olmstead, M.D., R. L. Pfeiffer, M.D., and C. E. Simpson, M.D., of Detroit; Jacob D. Brook, M.D., Grandville; J. E. Cooper, M.D., and J. W. Gething, M.D., of Battle Creek; C. B. Fulkerson, M.D., and F. E. Grant, M.D., of Kalamazoo; W. H. Honor, M.D., Wyandotte; A. B. Hewes, M.D., Adrian; W. E. McNamara, M.D., Lansing; J. E. Munro, M.D., Jackson, and E. L. Thirlby, M.D., Traverse City.

For Grand Rapids, the scientific and technical exhibit also set a record, with 149 displays lining the exhibition hall of the Civic Auditorium. On display at the Pantlind Hotel entrance was the Michigan Epilepsy Center trailer with its electroencephalograph and an attendant and patient for demonstration.



AUXILIARY LEADERS CHAT

Mrs. Leo J. Schaefer *(left)*, of Salina, Kansas, President of the AMA Woman's Auxiliary, discussed 1953-54 plans with MSMS Auxiliary leaders before speaking at the women's annual luncheon. With her, left to right, are Mrs. A. E. Milford, Ypsilanti, President-elect; Mrs. William Mackersie, Detroit, immediate Past President, and Mrs. Walter S. Stinson, Bay City, President.

THE PUBLIC WATCHED AND LISTENED

National news teletype trunk lines and national columnists carried news of the MSMS work on a coast-to-coast network. Major Michigan newspapers and wire services sent full time representatives to cover the week-long convention. Television stations in Western Michigan and radio stations over the entire state blanketed Michigan with the message of medicine.

More than ever before the spotlight of public attention focused upon the doctors' doings—even their private actions! Clippings returned indicate that with one exception every daily and weekly newspaper in Michigan carried one or more articles. Both Grand Rapids papers featured front page articles every day and as many as four supplementary articles in each edition. United Press and Associated Press carried daily stories. Even the pre-convention "hand-out" stories were generously used and the very complete convention press kits were praised by the science writers.

In addition to the inclusion of medical news on the regular news broadcasts, a total of sixteen special radio, television and service club appearances were arranged (see page 1226).

Such was the voice of medicine as it emanated from the interviews with officers and guest lecturers via the busy press room. No guest lecturer completed his duties until his host had shepherded him through the gauntlet of science writers under the watchful eyes of the hard working press committees. Members of the Press Committee of the House of Delegates were: J. E. Livesay, M.D., Flint, Chairman; R. H. Baker, M.D., Pontiac; L. Fernald Foster, M.D., Bay City; H. F. Dibble, M.D., Detroit; R. A. Johnson, M.D., Detroit; C. A. Payne, M.D., Grand Rapids. The Scientific



MORE EXHIBITS—MORE VISITORS

MSMS members had an opportunity to see 149 technical and scientific displays at the 88th Annual Session, the largest number for any MSMS exhibit. Conversely, exhibitors had the chance to meet with the greatest number of MSMS registrants ever to visit Grand Rapids (3,266). There was a constant flow of interested M.D.s through the vast exhibit hall.



200 "Good Right Arms"

Efficient ladies who make things tick in M.D. offices throughout Michigan also meet concurrently with the MSMS Annual Session. A record turnout of 246 members of the Michigan State Medical Assistants Society registered for their Fourth Annual Convention. Most of them were present for the annual banquet, where this photograph was taken.

Press Relations Committee were: C. A. Payne, M.D., Chairman; Fred Brace, M.D., H. G. Benjamin, M.D., and P. W. Kniskern, M.D., all of Grand Rapids.

GUESTS AND HOSTS

Eighteen related groups and societies, including the Woman's Auxiliary to the MSMS and the Michigan State Medical Assistants Society, met in conjunction with the Annual Session.

The Annual Session attracted special guests from every surrounding state and Canada, including officers and staff members from the medical societies of Ohio, Indiana, Illinois, Wisconsin and Ontario. Among these were Paul A. Davis, M.D., President, Ohio; Arkell M. Vaughan, M.D., President-elect, Illinois; W. H. Howard, M.D., President-elect, and James Waggoner, Executive Secretary, Indiana; Glenn Sawyer, M.D., Executive Secretary, Ontario, and Earl Thayer, Public Relations Director, Wisconsin.

Contributing signally to the success of the 88th Annual Session were the "ubiquitous hosts"—MSMS members assigned to guest essayists during their stay—who provided hospitality to the visitors and squired them from place to place. Once again, each guest had his individual host, so each distinguished speaker was made to feel "at home."

Special hosts to the guests from Grand Rapids were: H. P. Kooistra, M.D., H. J. Van Duine, M.D., W. H. Steffenson, M.D., J. A. Ryan, M.D., Leon DeVel, M.D., Jerome E. Webber, M.D., R. G. Laird, M.D., A. B. Thompson, M.D., D. B. Davis, M.D., F. L. Doran, M.D., R. H. Denham, M.D., G. D. Albers, M.D., C. A. Payne, M.D., S. M. Wells, Jr., M.D., A. J. Tesseine, M.D., L. P. Ralph, M.D., L. A. Ferguson, M.D., Donald Boersma, M.D., G. G Stonehouse, M.D., W. L. Bettison, M.D., Wm. Benner, M.D., W. B. Prothro, M.D., W. I. Lillie, M.D., R. H. Meade, Jr., M.D., J. H. Beaton, M.D., R. P. Nanzig, M.D., W. A. Hyland, M.D, J. D. Miller, M.D.

Other hosts were: W. M. LeFevre, M.D., Muskegon; R. J. Hubbell, M.D., Kalamazoo; G. C. Penberthy, M.D., Detroit; Arch Walls, M.D., Detroit; L. W. Hull, M.D., Detroit; H. B. Zemmer, M.D., Lapeer.

Behind the success of the 88th Annual Session was hard work on the part of many MSMS members, committee members, officers, and representatives of the "host" medical society of Kent County.

The usual digest of the Proceedings of the House of Delegates will be published in the December number of The Journal MSMS.

SCHEDULES OF PUBLIC PRESENTATIONS DURING ANNUAL SESSION

Television

Participant	*Station*	*Program*	*Date*
L. Fernald Foster, M.D., Bay City L. Paul Ralph, M.D., Grand Rapids W. B. Prothro, M.D., Grand Rapids Mr. Morris Barrett, Moderator, Grand Rapids	WOOD-TV	Health of Our City	Sept. 21
H. B. Zemmer, M.D., Lapeer Bob Runyon, News Reporter	WOOD-TV	Runyon Reporting	Sept. 23
Blair Holcomb, M.D., Portland, Ore. Bob Runyon, News Reporter	WOOD-TV	Runyon Reporting	Sept. 24
Crippled Children Exhibit personnel Carol DuVall, announcer and reporter	WOOD-TV	Chit Chat	Sept. 25

Radio

Participant	*Station*	*Program*	*Date*
News Reporters	WOOD WLAV WJEF	News Broadcasts	Sept. 21
Leo M. Taran, M.D., Roslyn, N. Y. Leon DeVel, M.D., Grand Rapids Mr. Donald Hoylman, news reporter	WJEF	News Interview	Sept. 22
E. J. McCormick, M.D. President of American Medical Association Mr. Donald Hoylman, news reporter	WJEF	News Interview	Sept. 23
W. J. Stapleton, M.D., Detroit Miss Mickey Sager, announcer	WOOD	Gretchen Lee	Sept. 24
Carol DuVall, announcer and reporter, describing MSMS exhibits	WOOD	Just Things	Sept. 25
Leslie N. Gay, M.D., Baltimore, Md. Miss Mickey Sager, announcer	WOOD	Gretchen Lee	Sept. 25

Service Club Talks

Participant	*Club*	*Host*
R. L. Novy, M.D., Detroit	Kiwanis	W. R. Vis, M.D., Grand Rapids
J. G. Molner, M.D., Detroit	Exchange	C. W. Uthoff, M.D., Grand Rapids Richard Sidell, M.D., Grand Rapids
A. E. Heustis, M.D., Lansing	Lions	H. J. Van Belois, M.D., Grand Rapids E. W. Schnoor, M.D., Grand Rapids
L. J. Hirschman, M.D., Traverse City	Rotary	C. B. Beeman, M.D., Grand Rapids N. L. Avery, Jr., M.D., Grand Rapids

Newspapers and Wire Service Representatives

Representative	*Representative*	*Service*	*Service*
E. W. Murphy	Burdett Ashley	*Grand Rapids Herald*	*Associated Press*
Ros Jensen	Jack Pickering	*Grand Rapids Press*	*Detroit Times*
George Zarafonetis	Allen Shoenfield	*United Press*	*Detroit News*
Dale Nouse			*Detroit Free Press*

William J. Stapleton, M. D.

"Michigan's Foremost Family Physician, 1953"

William J. Stapleton, M.D., 76-year-old Detroit general practitioner with a long history of effective medical society activity interwoven through his fifty three years' practice as a doctor of medicine, been called Detroit's foremost authority on medical history. He is an author of standing—his "By the Way . . ." column in *The Detroit Medical News* being avidly read. For years, his nom de plume has been "The Medicine Man." In addition to his M.D. degree, he holds degrees in both Pharmacy and Law, and is Former Associate Dean of Wayne University College of Medicine.



was chosen Michigan's Foremost Family Physician of 1953 by the House of Delegates at the 88th Annual Session.

He is the first metropolitan physician to be chosen for the honor.

Dr. Stapleton entered practice in Detroit in 1900, following his graduation from Wayne University College of Medicine. He first made house calls on a bicycle, later acquiring a horse and buggy, and then a Model T. But his qualifications as Foremost Family Physician go far beyond the concept of a friendly "horse and buggy doctor" who has devoted fifty-three years to his patients.

He is Past President of the Wayne County Medical Society and of the Detroit Academy of Medicine, and has a long record of committee service in MSMS and in his county society. He has

On July 1, 1951, he was named Emeritus Professor of Medical Jurisprudence at Wayne University, after thirty-seven-years on the staff.

His organization memberships are numerous.

Most important, he is still wholeheartedly practicing medicine. Detroit newspapermen who rushed to his office when Dr. Stapleton's selection was announced, found the patient came first. They waited in the outer office until Dr. Stapleton had completed his consultations.

A later number of THE JOURNAL will carry the story of Michigan's Foremost Family Physician of 1953 in greater detail.

LOOK TO MICHIGAN - - -

FOR OPPORTUNITIES IN MEDICINE

(The Michigan Health Council M.D. Placement Project)

OPPORTUNITIES in Medicine do exist in Michigan. This is evidenced in the number of M.D.s who have selected a location and started their practice in various areas of the state during 1953.

Assisting doctors of medicine, interns, residents and medical students to explore these opportunities is one of the major functions of the Michigan Health Council M.D. Placement Project.

A second principal function of the program is to alert the community to its responsibility and to the obligations which the people face if they are to be successful in attracting a doctor.

The Michigan Health Council M.D. Placement Program can be described succinctly as a plan to "FIND LOCATIONS FOR M.D.s and to ASSIST COMMUNITIES TO SECURE M.D.s"

This is a simple pronouncement but to make it work systematically it has been necessary to build a complex program behind it.

The Council of MSMS, recognizing the potential of a state-wide M.D. Placement Program, turned over the project to Michigan Health Council in January 1953.

Accepting it as a new challenge, The Health Council, with the guidance of the MSMS Committee on Rural Medical Service, developed a program which already has placed twelve doctors of medicine and laid the foundation for a comprehensive program, designed to do a total job.

COLLABORATION COUNTS—

Michigan State Medical Society
American Medical Association
County Medical Societies
Office of Hospital Survey and Construction
Michigan Basic Science Office
Michigan Board of Registration
Michigan Department of Health
Michigan Hospital Association
Michigan Hospital Service
Michigan Medical Service
University of Michigan School of Medicine
Michigan State Pharmaceutical Association
Veterans Advisory Committee to Selective Service System
Wayne University, College of Medicine

*Cover Photo. Alan D. Dawson, Ypsilanti (left), President Student AMA, University of Michigan Chapter. Jack Ryan, Royal Oak, (right) President, Student AMA, Wayne University Chapter.

DEVELOPMENT

To benefit from the experience of others, MHC made a study of material and information available. This data was gathered by mail and by personal contact with representatives from other states. In attending a regional meeting, held in Memphis, Tenn. and called by AMA, a representative from MHC was able to study the plans of many other states, incorporate their best systems, and integrate them with new ideas developed in the light of Michigan needs.

BROAD COLLABORATION ASSURED

Early in the planning stage it was decided that many interests should be encouraged to participate. Acceptance of this responsibility was enthusiastically received by other groups and working liaison was immediately established with organizations such as: Michigan Basic Science Office, Board of Registration in Medicine, the two Michigan Medical Schools and others listed in another part of this article.

The co-operation and genuine collaboration of all these groups has been an important factor in the success of the project to date.

ALL SOURCES EXPLORED

To make early contact with doctors of medicine, MHC opened all sources of supply and established channels through which these sources will continue to function.

Cultivation of these sources is a continuing process and regular, periodic contacts are being made.

Interns and Residents constitute the largest potential group. Of the 177 June 1953 graduates of



Hillman, Michigan, (pop. 400). The size of a town is best measured in "Community Spirit."

Michigan Medical Schools, forty-nine are interning at points outside the state of Michigan and 128 are located at Michigan Hospitals.

Contact has been established with each one of these men with the objective of stimulating his interest in OPPORTUNITIES IN MICHIGAN.

There are a total of 524 internships in Michigan hospitals. Many of these are filled by men from other states. A sincere invitation is extended these men to "LOOK TO MICHIGAN" for an opportunity to practice.

Medical Schools—Through the co-operation of A. C. Furstenberg, M.D., Dean of the School of Medicine, University of Michigan, and Dr. Gordon Scott, Dean of Wayne University, College of Medicine, MHC was provided an opportunity to work with the medical students.

Both University of Michigan and Wayne University Medical Schools are co-operating fully in the MHC program. They have assisted in distributing material and stimulating interest in the project among the undergraduates.

Pictured on the cover of this issue of JMSMS are Alan D. Dawson, president, Student AMA chapter at University of Michigan, and Jack Ryan, president, Student AMA chapter at Wayne University.

These young men represent the "future doctors of Michigan." The Michigan Health Council M.D. Placement Project urges them to "LOOK TO MICHIGAN."

Armed Forces—Liaison has been established with the Michigan Volunteer Advisory Committee to the Selective Service System. Through the efforts of Grover C. Penberthy, M.D., chairman of the committee, arrangements were made to provide MHC the names of doctors of medicine, prior to their termination with the armed forces.

Other States—The MHC program has been announced to other states and a co-operative arrangement has been established for mutual benefit.

AMA makes regular referrals to MHC and provides names of any doctors who apply for information on Michigan opportunities.

PROGRESS RECORDED

During the first few months, the entire MHC staff was utilized to set up the necessary systems and controls. Information was gathered from all possible sources and two basic rosters were prepared, one listing doctors of medicine and the other showing communities seeking the services of a doctor. M.D.s were listed on these rosters as follows:

> M.D., age 28, Michigan resident. Married, Protestant, holds Michigan license. Graduate University of Michigan 1952. Internship St. Mary's Hospital, Grand Rapids. Priority 4 classification. Desires small community, 3 to 5,000 population for private practice or will consider associate. Available July 1, 1953.
>
> L W—148

Communities appear on the other roster in the following manner:

> *SOUTH WEST*—Doctor Procurement Committee of this community (trade area of 2,500 plus nearby towns) will fully co-operate with M.D. locating there. Attractive arrangements are available for office space, housing, etc., 13 miles to 60 bed hospital. Three large cities within 40 miles. Rich farm area, accredited school, service clubs, golf, swimming, etc. Dial phones and visiting nurse service available.
>
> P W—176

To date, contact has been established with a total of 105 Michigan communities. Of these, ninety-one remain open on the roster.

A total of sixty-eight doctors of medicine have



This attractive clinic building was financed by public subscription. Residents of three surrounding townships participated.

registered with the service. Only thirty-nine remain on our roster at this time.

Twenty-eight Michigan hospitals with staff and residency openings have registered. Our present hospital roster carries twenty-six names.

As of September 1953, the MHC Placement Program has assisted the following doctors in making a decision as to a permanent location.

H. R. Deal, M.D.....Mem. Hosp. Clinic—Van Dyke
I. W. Clay, M.D.....Menominee
R. E. Pearson, M.D.....Boyne City
C. G. Kramer, M.D. (Industrial Med.).....Saginaw
R. W. Lieber, M.D.....Durand
C. J. Power, M.D.....Woodland
E. H. Lass, M.D.....Lapeer
Benjamin Shockley, M.D.....Charlotte
Roy Quamme, M.D.....Hillman
J. A. Millard, M.D.....Middleville
W. C. Peltason, M.D.....Marion
P. S. Marsa, M.D.....Lake Orion

Case Studies

Selecting several of the above locations at random, the following "case studies" describe the functioning of the Michigan Health Council M.D. Placement Program.

SEPTEMBER (1953) PLACEMENTS

Edward F. Kronschnabel, M.D....Gwinn
C. J. Power, M.D.....Woodland
Raymond Winfield, M.D.....Marlette
Robert H. Hamburg, M.D.....Detroit
Benjamin Shockley, M.D.....Charlotte
R. W. Lieber, M.D.....Durand
Roy W. Hodges, M.D.....Mackinaw City
Roy K. Quamme, M.D.....Hillman
J. R. Gehman, M.D.....Standish

Boyne City

February 5, 1953. Chamber of Commerce wrote to MSMS describing need.

February 10, 1953. MSMS forwarded inquiry to MHC.

February 18, 1953. MHC established contact with Boyne City.

February 16, 1953. MHC established contact with Robert E. Pearson, M.D., intern at Highland Park General Hospital.

February 23, 1953. Dr. Pearson visited Boyne City and talked with contact persons developed by MHC. Several weeks later Dr. Pearson again visited Boyne City, accompanied by Mrs. Pearson.

The local committee again met them and introduced Mrs. Pearson to key women in the community.

Following this trip Dr. Pearson decided to locate in Boyne City if the community was willing to wait until he finished his internship the following June. MHC urged them to wait for Dr. Pearson, which they did.

Dr. Pearson set up practice in Boyne City in July, 1953.

Woodland

January, 1953. Woodland writes Michigan Board of Registration in Medicine and Governor Williams, who made referral to MSMS.

February, 1953. MSMS refers Woodland's request to Michigan Health Council.

February 25, 1953. MHC refers first doctor to Woodland. Dr. Pearson decided, however, to locate in Boyne City.

May 18, 1953. The names of seven doctors were supplied by the MHC.

June 16, 1953. Dr. Power contacts M.D. Placement Service seeking to relocate. He is referred to Woodland.

July, 1953. Dr. Power expresses interest in Woodland, although he visits several other openings.

July 23, 1953. MHC representatives meet with Woodland Doctor Procurement Committee regarding housing and office arrangements and following this, meet again with Dr. Power.

August, 1953. Dr. Power decides to locate in Woodland beginning September 1 upon completion of remodeling of home-office provided by community at nominal rental fee.

Hillman

April 10, 1952. Hillman Rotary Club contacted MSMS to place advertisement for GP in JMSMS.

December 3, 1952. Hillman advises MHC of organization of Doctor Procurement Committee and construction of clinic building and residence. Ask MHC for assistance in locating GP.

December 9, 1952. MHC acknowledges contact and starts making referrals.

(Continued on Page 1232)

At the welcoming celebration for Roy K. Quamme, M.D., Hillman's new physician, the President of the Michigan Health Council, H. B. Zemmer, M.D., and John R. Rodger, M.D., spoke to more than 300 assembled guests. Dr. Zemmer congratulated the citizens of the area on their success and said, "The Michigan Health Council M.D. Placement Service is proud to have played a part in obtaining a doctor of medicine for your community."

Dr. Rodger, from nearby Bellaire, told the citizens that their responsibility did not end now that Dr. Quamme and his family had arrived. Likening the rural doctor to the volunteer fireman in the area, he pointed out, "your doctor cannot hope to stay in your community if he is called only for medical emergencies."

Others who participated included L. F. Hayes, M.D., and Robert S. Libke, M.D., President and Secretary of the Medical Society of North Central Counties, and E. S. Parmenter, M.D., Director of the Tri-County Health Unit in that area.

Medical Coverage for Michigan

In 1950 there were 6,937 physicians in Michigan, providing in Michigan a ratio of one physician for every 919 persons. The national existing ratio was one physician for every 749 persons at that time.

Of the above 6,937 Michigan physicians, 2,663 were actively engaged in private practice in the eighty-two counties of the state outside of Wayne County, providing a ratio in these eighty-two counties of one physician for every 1,456 persons, or approximately one-half as many physicians for the people of Michigan outside of Wayne County as the national average.

Between the years of 1940 and 1949, the University of Michigan Medical School and Wayne University College of Medicine graduated 1900 doctors. During the same period, the State Board of Registration in Medicine approved a total of 3,815 applicants to practice medicine in Michigan. In other words, twice as many were licensed to practice in Michigan as graduated from the two medical schools.

It should be pointed out that 45 per cent of the doctors in practice in counties outside of Wayne County were graduated from medical schools located outside of Michigan. It is highly probable that many of these were attracted to this state by the intern or resident training programs in hospitals approved for intern and resident training in Michigan at that time.

Statistical data available indicate that approximately 60 per cent of the interns and residents trained in hospitals outside of University or medical teaching centers will establish their practices in or near the community where they are trained. Thirteen Detroit area hospitals would take between 250 and 300 interns annually. These hospitals have had intern programs for many years which may be one of many reasons for the better doctor-patient ratio in the metropolitan area.

It has been estimated that the population of Michigan will increase by two and one-half to three million within the next fifteen to twenty years.

Each year the state loses approximately 100 practicing physicians through death, retirement, or transfer to other states.

The estimated population increase alone would require an additional 2,500 physicians in the next fifteen to twenty years, if we are to maintain our present low ratio.

If the present rate of losing physicians continues, an additional 2,000 more—or a total of at least 4,500 new doctors—will be needed to maintain our present low ratio in the next fifteen to twenty years.

How Can We Provide More Doctors for Michigan?

Medical School Graduates.—The University of Michigan Medical School and Wayne University College of Medicine will probably graduate approximately 260 to 275 medical students annually, or roughly 5,000 within the next twenty years.

If we could expect that all of these would practice in this state we might anticipate maintaining our present low ratio.

From past experience, however, there is every likelihood that approximately 30 per cent of this number will take their intern or residency training in hospitals outside of Michigan, leaving roughly 3,500 physicians to meet our needs.

Internship and Residency Training.—There are 34 hospitals in the state of Michigan as of July 1, 1953, approved for intern training. According to the matching plan these hospitals would have taken 555 interns in 1953-54.

Six hospitals failed to obtain any interns.

Twenty-nine hospitals appointed 350 interns, or 61.3 per cent of the total number of interns wanted in the state.

In 1951, thirty-two hospitals wanted 503 interns and obtained 305, or 70 per cent of the total number wanted.

Experience strongly suggests that hospitals with intern training programs play nearly an equal role in attracting young physicians to the state as medical schools do in producing young physicians for the state.

Therefore, if we are to improve upon our present doctor-patient ratio and meet the demand of the estimated increase of population in Michigan,

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Presented by Drs. H. A. Towsley, J. M. Sheldon, and Howard H. Cummings to The Council at Grand Rapids, September 26, 1953, as a report of the Sub-committee in Intern Training as a Means of Procuring Physicians for Michigan. Published at the direction of The Council.

it is of vital importance that those hospitals approved for intern training maintain acceptable intern training programs which will attract not only our own State Medical School graduates, but more graduates from schools outside of the state.

In February, 1953, the Council on Medical Education and Hospitals of the AMA published a revised edition of the Essentials of an Approved Internship. This publication sets forth the general requirements to be met in hospitals having approval for intern training.

At present there are approximately 11,000 positions for intern training in the country and approximately 6,500 to 7,000 medical graduates to fill these positions. Hence, there is a great probability that hospitals now approved for intern training that do not meet the standards set forth by the Council on Medical Education and Hospitals of the AMA will lose their approval for intern training.

It is of vital importance, therefore, that doctors practicing in hospitals approved for intern training in Michigan and the hospital administrative boards governing those hospitals, abide by the rules and regulations set forth by the Council on Medical Education and Hospitals.

It is the opinion of this Committee that every member of the Michigan State Medical Society should take an active interest in the establishment and maintenance of accredited intern training programs.

Your Committee therefore respectively recommends that the Council of the Michigan State Medical Society approve and encourage compliance with *the Essentials of an Approved Internship* as published in the February, 1953, issues of *The Journal of the American Medical Association* by the Council on Medical Education and Hospitals.

J. M. Sheldon, M.D.
E. D. Spalding, M.D.
F. A. Weiser, M.D.
H. A. Towsley, M.D., *Chairman*

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LOOK TO MICHIGAN - - -

(Continued from Page 1230)

March, 1953. Alpena-Alcona-Presque Isle County Medical Society confirms need.

April-May-June. Continued to make referrals. Made field trip to explore community at first hand. August, 1953. Committee accepted invitation to visit Lansing office for discussion and planning.

September, 1953. Following personal interview with Dr. and Mrs. Quamme at Lansing office, MHC refers Dr. Quamme direct to Hillman.

September 28, 1953. Dr. Quamme decides to locate in Hillman.

October 5, 1953. MHC representative visits Hillman to assist in plans for open house and reception.
October 9, 1953. Dr. Quamme opens practice in Hillman.

Progress

Conceived as a long-range project, the progress to date has been gratifying. In the brief case studies given above it is obvious that a satisfactory start has been made. It is apparent that the challenge is being met and that we are moving toward our objective of providing an effective service which will assist the M.D. in making his important decision and help the community secure needed medical care.

Seventy per cent of all rectal and anal cancers, and 54 per cent of cancers of the large bowel, develop within reach of the physician's finger.

* * *

Routine palpation of the prostate in elderly patients is the best means of raising cancer survival rates.

* * *

The lower extremities are involved in 74 per cent of melanoma in negroes.

* * *

Melanoma occurs up to 4.4 times more frequently in whites.



Various factors during pregnancy (intestinal displacement, atony, inactivity) make it virtually impossible for most women to go through the gestation period without constipation.

CONSTIPATION IN PREGNANCY:

Satisfactorily controlled with Metamucil®

Metamucil, with its physiologic principles of "smoothage" and "normohydration," is well tolerated for pregnancy constipation. This bland vegetable colloid may be used throughout the entire nine-month period without fear of forming a "habit" and without irritation to the mucosa.

Greenhill[1] suggests that Metamucil be given every other night. He also recommends that Metamucil be given in conjunction with a proper diet, during the lying-in period of the puerperium.

Metamucil is the highly refined mucilloid of Plantago ovata (50%), a seed of the psyllium group, combined with dextrose (50%) as a dispersing agent. It is accepted by the Council on Pharmacy and Chemistry of the American Medical Association.

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SEARLE Research in the Service of Medicine

Michigan's Department of Health

Albert E. Heustis, M.D., Commissioner

HEALTH SCREENING FOR ADULTS

A health screening program for adults that may provide worthwhile data on the value and conduct of such a program was carried on in an Upper Peninsula town on October 5, 6 and 7.

Under the sponsorship of the Alger-Schoolcraft Health Department, with the assistance of the Michigan Department of Health, and with the approval of the local physicians and of management and labor in the plant involved, the 450 to 500 employes of the Munising Paper Company were offered a series of screening tests designed to pick up the beginning signs or indications of the major chronic diseases. Participation was entirely voluntary on the part of the workers and the screening was done on company time.

The screening procedure included checking height and weight, blood pressure, hemoglobin, blood specimens for syphilis and diabetes, chest x-ray for tuberculosis, heart abnormalities and cancer of the lungs, urine specimens for albumin, sugar and microscopic tests for indications of heart conditions.

The Powers laboratory of the Michigan Department of Health handled the laboratory work involved.

Each person screened gave the name of his doctor, and significant findings were reported directly to him. A card to the person with such findings informed him that the results of his tests had been reported to his doctor and urged that he get in touch with him. The person with negative findings was told by card that his screening indicated no abnormal conditions but that it was by no means a thorough medical examination and gave no final assurance that everything was all right.

The local health department is following up the persons with significant findings to try to make sure that they see their doctor, and having seen him that they return for needed treatment.

It is hoped that the program will give information on a number of points that need clarifying in the field of adult health and chronic disease control. It should indicate how successful such screening can be in finding incipient chronic disease in supposedly well, working-age men and women. It will give some data on the prevalence of such conditions. It will throw some light on possible costs of such a screening program and whether results justify the expenditure. It will help to determine what are practical screening levels, so that more than 50 per cent of those referred to physicians will be confirmed as abnormal.

The program should also help to work out a mutually satisfactory pattern of community co-operation between health department, practicing physicians, management and labor in promotion of adult health, with the health department carrying responsibility for preliminary screening to find persons in need of examination and medical care, and following through on helping to make sure that such persons reach the office of their family doctor.

ACCIDENTS TAKE HEAVY TOLL OF PRESCHOOL CHILDREN

Last year in Michigan 341 boys and girls under five years old were killed in accidents and over half—55 per cent—in mishaps around the home.

"Mechanical suffocation" was said to take the heaviest toll in the home, claiming the lives of 61. There is, however, considerable speculation as to this as a cause of death. Studies indicate that many babies thought to have died of suffocation may actually have died of illness, signs of which had gone unnoticed in the days preceding death.

Choking from food, putting beans or marbles up the nose, or other instances of inhalation of or ingestion of objects causing obstruction or suffocation claimed 47 lives.

Fires and explosions—mostly fires—claimed the lives of 46 youngsters of preschool age; 18 met death from burns from hot substances, such as steam and boiling liquids; 76 were killed in motor vehicle accidents—47 as passengers, 29 as pedestrians; and 33 were drowned; 19 died as a result of falls and 13 from accidental poisoning.

DEPUTY DIRECTOR APPOINTED

Frank J. Condon, M.D., has been appointed deputy director of the Oakland County Health Department, in charge of the Royal Oak office.

NEW NUTRITION CONSULTANT

Miss Marie Buckley has joined the nutrition staff of the department, replacing Janet Wardlaw who resigned. Miss Buckley will work with the Wayne and Macomb county health departments.

TUBERCULOSIS DURING CHILDHOOD

(Continued from Page 1173)

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NEW LOCATION!

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- *Excellent medical supervision and nursing care.*

REASONABLE RATES **CHEERFUL SURROUNDINGS**

The Michigan Alcoholic Rehabilitation Foundation is a non-profit organization devoted to proper hospitalization of alcoholics definitely seeking to stop drinking.

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In Memoriam

ABRAHAM M. ALTSHULER, M.D., of Detroit, who practiced in that city for thirty-nine years and was a Wayne County medical examiner for eighteen years, died August 27, 1953, at the age of sixty-two.

A member of a large family, most of whom were physicians, Dr. Altshuler was born in Russia and received his preliminary education in private schools. In 1912, he entered the Medical School of the University of Leipzig, Germany, later attending the University of Berne, Switzerland, Medical School, where he received his M.D. degree in 1917.

Dr. Altshuler came to the United States in 1922, entering general practice in Detroit shortly thereafter. By avocation he was a music lover and composer.

Dr. Altshuler is survived by his wife, Ray, and a brother, Ira Altshuler, M.D., Detroit psychiatrist.

ALVIN H. BENZ, M.D., of Ann Arbor, died August 20, 1953, at the age of forty-six.

Dr. Benz had practiced in Ann Arbor since 1946 and at the time of his death was on the staff of St. Joseph Mercy Hospital, Ann Arbor, and Beyer Memorial Hospital, Ypsilanti. From 1942 to 1946 he served as a major in the army medical corps.

A native of Dexter, Michigan, Dr. Benz was a graduate of the University of Michigan, receiving his M.D. degree in 1931. He interned at Harper Hospital, Detroit, and St. Luke's Hospital, Chicago, later becoming resident ophthalmologist at University of Michigan hospital in 1933. In 1935 he went to Chattanooga, Tennessee, where he practiced for seven years prior to World War II.

Dr. Benz is survived by his wife Bettye, and three sons by a previous marriage, Thomas A., Richard B., and Loren W., all of Cleveland. Also surviving are a brother, Raymond W. Benz of Ann Arbor, and a sister, Mrs. Clyde Earl of Long Beach, California.

ALVIN T. BONATHAN, M.D., a Flint physician and surgeon since 1930, died July 28, 1953, at the age of fifty-five.

Dr. Bonathan, a native of Hubbell, Michigan, was graduated from the University of Michigan Medical School in 1929. He took his undergraduate work at Michigan College of Mining and Technology and at Marquette University, Milwaukee. He was a veteran of World War I.

Dr. Bonathan was active in several Masonic organizations. He was a member of the International College of Surgeons and was former secretary of the Flint Academy of Surgery. He was a member of the medical staff of all three Flint hospitals and was a director of Merchants & Mechanics Bank.

He leaves his wife, three daughters, Mrs. Irwin G. Madison, Mrs. Richard A. Allan, and Bettie, all of Flint; three sisters, and a brother.

Say you saw it in the Journal of the Michigan State Medical Society

DONALD L. GORDON, M.D., of Oscoda, died September 3, 1953, at Hackensack, N. J., where he had been vacationing with his family. He was forty-four years old.

Dr. Gordon was a native of Detroit. He attended Kenyon College, Gambier, O., and was graduated from McGill University Medical School, Montreal, Que. Dr. Gordon interned at Mercy and Foote hospitals in Jackson, and at Royal Victoria Hospital, Montreal.

He practiced in Jackson before entering the Navy in 1942. After serving with the First Marine Division, Dr. Gordon was discharged in 1945 with the rank of Lieutenant Commander. He returned to his practice in Jackson, remaining there until 1948, when he moved to Oscoda.

Dr. Gordon is survived by his wife, Clare; a daughter, Kiltie, and his mother, Mrs. Grace Gordon, widow of a Detroit physician, now living in New York.

FRANK RIZZO, M.D., of Grosse Pointe Park, died September 13, 1953, at the age of forty-nine. Dr. Rizzo had lived in the Detroit area for thirty-seven years and was a member of the staff at St. Joseph's Mercy Hospital. He was a native of Trapani, Italy.

Dr. Rizzo was graduated from Wayne University in 1926 and from the Wayne University College of Medicine in 1929.

He is survived by his wife, Doris; a son, Frank; a daughter, Bridget, three brothers and one sister.

SEVERE URTICARIA

(Continued from Page 1210)

Summary

A case of severe allergic reaction to Butazolidin® characterized by urticaria and angio-edema is reported. Excellent results were obtained using repository adrenocorticotropic hormone.

References

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Potent cough sedative - dose, 1/128 grain to 1/64 grain.

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NEWS MEDICAL

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YOU ARE URGED TO ATTEND

MICHIGAN AUTHORS

V. K. Volk, M.D., Dr.P.H., F.A.P.H.A., County Commissioner of Health, Saginaw, is co-author of an article entitled "Reinoculation with Multiple Antigen Preparations of Free-living Children Previously Inoculated with Multiple Antigen Preparations" and an article entitled "Observations on the Effectiveness of Various Scarlet Fever Antigens Used in Combination with Other Antigens in Multiple Antigen Preparations," both published in the *American Journal of Public Health* and *The Nation's Health,* July, 1953.

Stefan S. Fajans, M.D., Ann Arbor, is the author of an article entitled "Aberrations of Potassium Metabolism in Clinical Medicine" published in the *American Practitioner and Digest of Treatment,* September, 1953.

Henry K. Ransom, M.D., Ann Arbor, is the author of an article entitled "Cancer of the Stomach," an abstract from *Surgery, Gynecology and Obstetrics,* which is published in *American Practitioner and Digest of Treatment,* September, 1953.

Hermann Pinkus, M.D., Monroe, is the author of a paper entitled "Premalignant Fibroepithelial Tumors of the Skin" published in the *Archives of Dermatology and Syphilology,* June, 1953.

William S. Reveno, M.D., Detroit, is the author of an article entitled "The Value of the Periodic Health Examination," abstracted in *Current Medical Digest,* August, 1953, from THE JOURNAL, MSMS, May, 1953.

Reed M. Nesbit, M.D., University Hospital, Ann Arbor, is the author of an article entitled "Problems Relating to the Recognition of Hydronephrosis in Everyday Medical Practice" published in *Current Medical Digest,* August, 1953.

O. T. Mallery, Jr., M.D., Institute of Industrial Health, Ann Arbor, "Diagnosis of Occupational Disease" published in *Current Medical Digest,* September, 1953, abstracted from THE JOURNAL MSMS, June, 1953.

Vlado A. Getting, M.D., Dr.P.H., Ann Arbor, is the author of an article entitled "The Family Physician and the Public Health Department," published in *The Journal of the American Medical Association,* September 26, 1953.

A. D. Ruedemann, M.D., Detroit, is the author of an article "Foveal Co-ordination" in the *American Journal of Opthalmology,* September, 1953.

Harry A. Towsley, M.D., University of Michigan Medical School, is the author of an article entitled "Why Didn't We Get All the Interns We Wanted?" published in *Hospitals,* October, 1953.

Edwin P. Vary, M.D., Flint, is the author of an article "Method of Gastrointestinal Anastomosis" appearing in *Archives of Surgery,* for September, 1953.

Robert E. L. Berry, M.D., Ann Arbor, is the author of an article entitled "Clinical Aspects of Acute Peripheral Oligemia from Plasma Water and Sodium Salt Loss," published in *Archives of Surgery,* September, 1953.

Laurence S. Fallis, M.D., and **James Barron, M.D.,** Detroit, are authors of an article entitled "Modified Technique for Total Colectomy in Ulcerative Colitis," published in *Archives of Surgery,* September, 1953.

Roland M. Athay, M.D., medical superintendent Wayne County General Hospital and Infirmary, Eloise, is the author of an article entitled "Hospital 'Cost Centers'—A Valid Concept for Chronic Care" abstracted in *Trustee,* the journal for hospital governing boards, August, 1953, from THE JOURNAL MSMS, May, 1953.

TELEVISION PROGRAM

"The March of Medicine"—over NBC and CBC-TV networks.

October 8—Hope for the Heart Patient.

November 5—A Report on the Fight Against Cancer.

December 3—Highlights from the AMA Clinical Meeting in St. Louis.

* * *

The Army, which had a physician-troop ratio of 3.61 on September 1, has begun redistribution of 450 newly commissioned physicians to the Navy (3.69 ratio) and Air Force (3.10 ratio). If these medical officers don't ask for interservice transfer, "then it may be necessary to detail some of them," Defense officials state. Overall ratio for the armed services September 1 was 3.49, according to the department. Last January the Health Resources Advisory Committee recommended the doctor ratio be reduced to 3.0, and in May Secretary of Defense Wilson directed that this ratio be reached by June 30, 1954. As late as June of this year, however, the ratio was 3.45. Since July 1 the department has stopped counting interns and counts only half of its residents in arriving at the doctor ratio. Previously, both groups were counted in full. On September 1, services listed 555 interns, 769 residents.

The redistribution program was announced simultaneously with disclosure that the military was halting drafting of physicians for an indefinite period. The department explained that it had so many volunteers after extension of the doctor draft and issuance of August call for 542 physicians, it did not have to resort to the draft. The department also said many doctors entitled to release under the new law are staying on, and that there are fewer deferments for professional training.—*AMA Washington Letter.*

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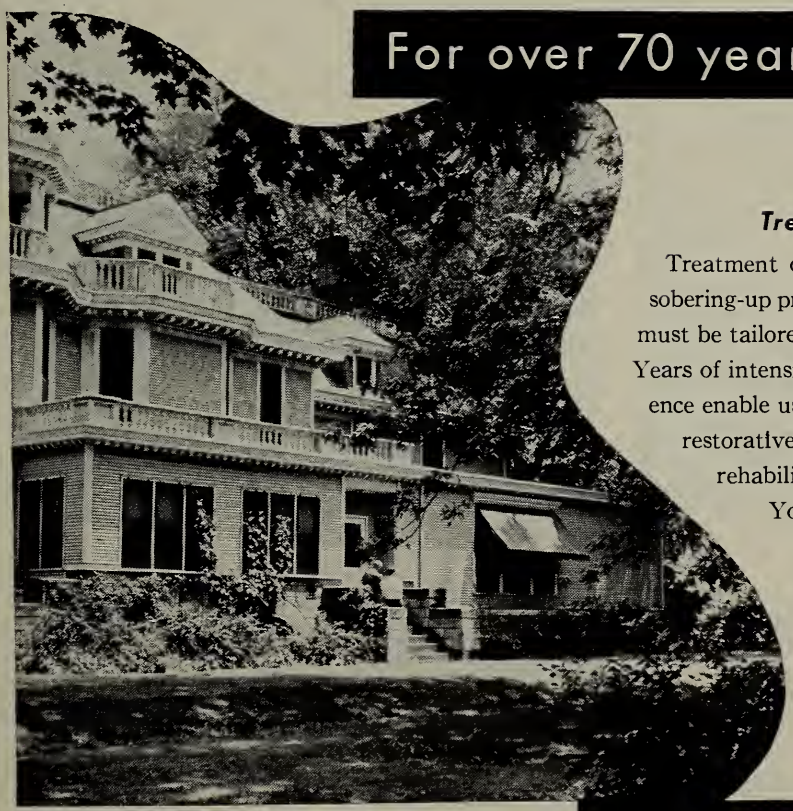
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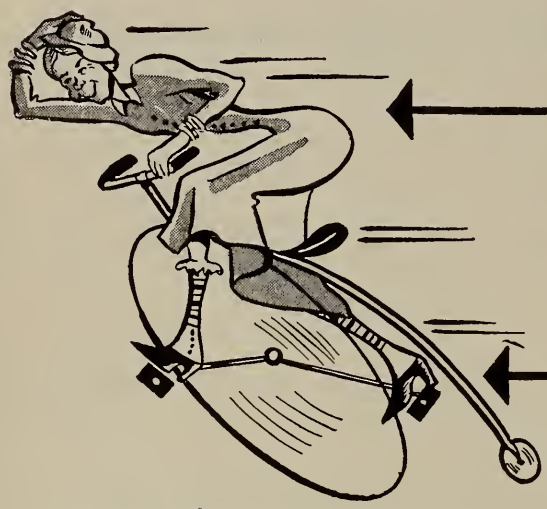
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You may refer female as well as male patients—we are also equipped to care for narcotic or barbiturate addiction. Moderate rates; treatment period sometimes shortened to just two weeks.

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New Wayne Medical School Building

On the fifteenth of October, 1953, the Wayne University College of Medicine accepted its new Medical Science Building which was erected on the medical college campus of the University by the State of Michigan. This building will provide 141,000 square feet of the most modern laboratory space for teaching and for research. It will house the departments of anatomy, microbiology, pathology, physiological chemistry and physiology and pharmacology and quarters for the basic services of a modern medical school. The administrative offices of the medical school will be moved to the new building. A cafeteria seating 400 persons is a part of the first floor.

This new facility will enable the Wayne University College of Medicine to accept classes of 100 students each. It is located close to the Detroit Receiving Hospital, the present College of Medicine buildings and the Detroit Memorial Hospital, a private institution. In this growing medical center area, the City of Detroit has recently completed and put into operation a new outpatient clinic building with special research floors for the College of Medicine, and last August the State started the construction of a Neuropsychiatric Institute to be operated by the College of Medicine. The total outlay in money for new construction is approximately thirteen million dollars. Other buildings are contemplated which will furnish Detroit with a modern medical center close to the heart of the city and in one of the most accessible regions in the whole area.

* * *

The scientific meeting of the Michigan Chapter of the American College of Chest Physicians was held in conjunction with the State meeting in Grand Rapids, September 23, 1953. The subject, "The Modern Medical and Surgical Treatment of Pulmonary Tuberculosis," was interesting enough to induce a well attended meeting and prompted a lively discussion between the Medical men and Surgeons.

Dr. Paul Chapman, of Detroit, led the discussion on the modern medical treatment and Dr. Richard Meade,

(Continued on Page 1240)



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(Continued from Page 1240)

of Grand Rapids, the surgical phase. Dr. Lawrence Pratt, new president, was the moderator. Drs. Hudson and Dodrill summarized for the surgeons and Dr. Howes for the medical men.

Since the development of Streptomycin, Pas, and Isonicotinic Acid Hydrazide, the Tubercle Bacillus has been fighting a losing battle to survive within the human body. In the final discussion, Dr. Chapman stated that chemo-antibiotic therapy has proved to be a specific weapon in the fight against tuberculosis. However, there still will be plenty of work for the thoracic surgeons because too many cases go undiagnosed before destruction of pulmonary tissue develops.

* * *

Progress in the development of a practical polio vaccine was reported by Dr. Jonas E. Salk, research professor of bacteriology at the University of Pittsburgh School of Medicine.

The Pittsburgh scientist, whose studies are being supported with March of Dimes funds from the National Foundation for Infantile Paralysis, revealed that an additional 474 children and adults have been vaccinated with several experimental vaccines. The vaccines used have proved to be completely safe and capable of stimulating the production of polio antibodies.

Plans are now being made by the National Foundation for Infantile Paralysis for large scale testing of a polio vaccine to determine how effective it is in protecting against the disease under natural conditions of exposure.

In all parts of the country, the American people voluntarily increased their protection against the unexpected costs of hospital, surgical and medical care to new heights in 1952—reports the Health Insurance Council in its current annual survey of accident and health coverage in the United States. The AMA's Council on Medical Service is distributing copies of the report to medical schools, teaching hospitals, and state and county medical societies.

Organizations contributing data to the Insurance Council's report include insurance companies, Blue Cross, Blue Shield and various other independent plans sponsored by business and industry, employe benefit associations and private group clinics.

Statistical highlights of the report: Nearly 92 million covered against *hospital expense,* an increase of more than 5½ million over 1951; more than 73 million protected against *surgical expense,* an increase of more than 7½ million; nearly 36 million carried *medical expense* coverage, an increase of 8 million; more than 38 million protected by *disability insurance,* a new high. In addition, nearly 700,000 persons had *catastrophic coverage*—the newest form of voluntary health protection designed to help meet the catastrophic costs of very serious illness.

Additional copies of the report are available on request from the Council on Medical Service.—*AMA News Notes.*

* * *

The Woman's Auxiliary to the American Medical Association presented a check for $10,000 to the AMEF during the Auxiliary's annual meeting in New York last

(Continued on Page 1244)

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The new WELCH ALLYN instrument case that offers you far greater

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Laboratory Fees in Hospital	5.00	10.00	15.00	20.00
Operating Room in Hospital	10.00	20.00	30.00	40.00
Anesthetic in Hospital	10.00	20.00	30.00	40.00
X-Ray in Hospital	10.00	20.00	30.00	40.00
Medicines in Hospital	10.00	20.00	30.00	40.00
Ambulance to or from Hospital	10.00	20.00	30.00	40.00
COSTS (Quarterly)				
Adult	2.50	5.00	7.50	10.00
Child to age 19	1.50	3.00	4.50	6.00
Child over age 19	2.50	5.00	7.50	10.00

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(Continued from Page 1242)

June. In addition to the treasury gift, the various auxiliaries and their individual members have donated $19,492.61 to the Foundation from June, 1952, through May, 1953.

* * *

Found in Civic Auditorium at 1953 MSMS Annual Session: Gold tie clasp with Fraternal emblem attached. Owner is requested to write MSMS, Box 539, Lansing, Michigan, and describe same.

* * *

The Michigan State Medical Assistants Society officers for the ensuing year are: President—Mrs. Elizabeth Peck, Detroit; Recording Secretary—Mrs. Marion Hiel, Lansing; Corresponding Secretary—Miss Haley Cummins Carol; Treasurer—Mrs. Marie Nielsen, Muskegon.

* * *

Hugh W. Brenneman, Lansing, MSMS Public Relations Counsel, has been invited to give the opening address at the first Public Relations Conference of the Ontario Medical Association, November 25, at the Royal York Hotel, Toronto. His topic will be "The Need for a Public Relations Programme."

Attending the conference will be representatives from the fifty-two branch societies of the OMA, as well as press and radio representatives.

* * *

V. K. Volk, M.D., Saginaw, **Franklin H. Top, M.D.**, Iowa City, Iowa, and **William E. Bunney, Ph.D.**, New York, are authors of an article "Observations on the Effectiveness of Various Scarlet Fever Antigens Used in Combination with Other Antigens in Multiple Antigen Preparations" which appeared in the *American Journal of Public Health,* July, 1953.

* * *

Health Appointments.—President Eisenhower has made a number of appointments in his official family of interest to the medical profession. They are:

Melvin A. Casberg, M.D., to be Assistant Secretary of Defense for Health and Medical Affairs, a post whose establishment has been long advocated by the American Medical Association. Dr. Casberg will supervise the department's medical programs and advise the Secretary of Defense on health policies. Dr. Casberg, former dean of St. Louis University Medical School, has been serving as a special assistant to the Secretary. This post had been offered to a Michigan physician.

Harvey V. Higley of Marinette, Wisc., chairman of the board, Ansul Chemical Co., to be head of the Veterans Administration. He has been active for many years in the American Legion, serving as state commander and member of the Legion's National Executive Committee and National Retirement Committee. He succeeds Carl R. Gray, Jr., who recently resigned.

Russell R. Larmon, professor of administration at Dartmouth College, to be an Assistant Secretary of Health, Education, and Welfare. This is one of two Assistant Secretaries provided under Reorganization Plan 1 which elevated the Federal Security Agency to cab-

(Continued on Page 1246)

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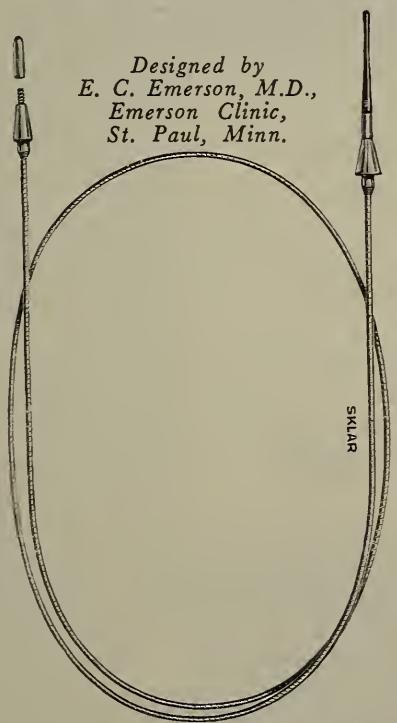
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(Continued from Page 1244)

inet status. Prof. Larmon has served as consultant on many New Hampshire state commissions.

* * *

The American College of Physicians Regional Meeting for Michigan will be held in Ann Arbor on December 5, 1953. The scientific program will be held in the H. H. Rackham auditorium beginning at 9:30 a.m. Nineteen papers will be presented.

A reception and banquet will be held the evening of December 5 at the Allenel Hotel for members of the College and their guests.

The medical profession is extended a cordial invitation to attend the scientific sessions. For program, write H. M. Pollard, M.D., Governor for Michigan, University Hospital, Ann Arbor.

The Biddle Lecture, presented in Grand Rapids on September 23, 1953, at the 88th Annual Session of the Michigan State Medical Society by U. S. Senator Homer Ferguson was given under the sponsorship of the Michigan Foundation for Medical and Health Education, Inc. By official action of its Board, the Foundation will sponsor all Biddle Lectures at future MSMS Annual Sessions, as a memorial to the late Andrew P. and Grace Biddle.

The Council of the Michigan State Medical Society at its September 25 meeting in Grand Rapids, placed upon its minutes a vote of thanks to the Michigan Foundation for Medical and Health Education, Inc. (E. I. Carr, M.D., Lansing, President) for sponsorship of this lecture.

* * *

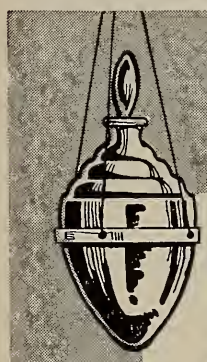
The American Society for the Study of Sterility announces its 1954 contest for the most outstanding contribution to the subject of infertility and sterility. A cash award of $1,000 will be presented to the winner whose essay will appear on the program of the 1954 meeting. Essays must be received no later than March 1, 1954. For particulars, address the Society in care of Herbert H. Thomas, M.D., Secretary, 920 S. 19th Street, Birmingham, Alabama.

* * *

The National Foundation for Infantile Paralysis announces the availability of a number of additional post-doctoral fellowships to candidates whose interests are research in medicine and related biological and physical sciences. The fellowships cover from one to five years with stipends ranging from $3,600 to $7,000 a year. (Marital and dependency status is considered in determining individual awards.) For complete information, write the Foundation at 120 Broadway, New York 5.

* * *

Thirty weekly one-hour television programs have been inaugurated by the American Cancer Society in co-operation with the Columbia Broadcasting System to acquaint the medical profession with up-to-the-minute methods of detecting, diagnosing and treating cancer. The program is beamed over a closed circuit connecting medical centers in New York, Boston, Philadelphia, Pittsburgh,



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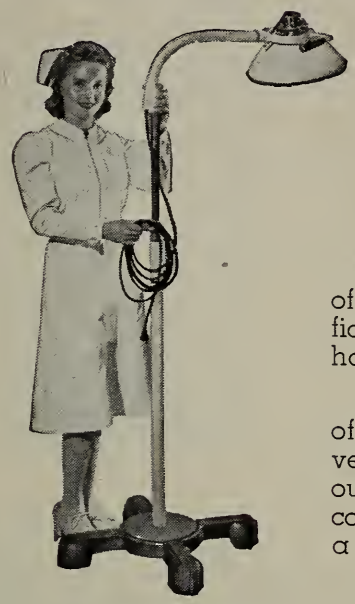
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Lamphead titlts and rotates to any position; long offset arm permits positioning directly over table; vertical adjustment up to 75" and down to 48", without manual locks or clamps; non-tipping base has concealed casters for easy mobility. Supplied with a 20-ft. rubber covered cord.

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Detroit, in co-operation with the local county medical society. The first year's shows will be telecast from specially constructed studios in New York's Memorial Cancer Center and the Francis Delafield Hospital attached to the Columbia Presbyterian Medical Center.

The programs, beginning October 21, are presented every Wednesday from 5 to 6 p.m. For complete program, write Mefford D. Ruggin, Executive Vice President, American Cancer Society, 47 Beaver St., New York 4.

* * *

Clark D. Brooks, M.D., Detroit, recently retired as a member of the Detroit Board of Education after serving in that capacity for fourteen years, twice as its president.

* * *

Alfred LaBine, M.D., Houghton, recently was honored when the fourth degree assembly of the Copper Country Knights of Columbus named its fifty candidate class for him, terming the initiatory group the "Sir Knight Dr. Alfred LaBine Class."

* * *

V. K. Volk, M.D., Saginaw, Health Commissioner Saginaw Department of Health, recently received a scroll, signed by 200 tuberculosis patients at Saginaw County Hospital, as a tribute for his role in bringing television into the room of every patient at the hospital.

* * *

The University of Michigan Medical School's Triennial Medical Alumni Conference was held in Ann Arbor on October 15-16-17. The program was presented by twenty University of Michigan medical staff members and eight medical alumni outstanding in their specialties throughout the United States: Gould A. Anderson, M.D., of Oak Ridge, Tennessee; Carl W. Eberbach, M.D., Milwaukee; John C. Jones, M.D., Los Angeles; Thomas M. Durand, M.D., Philadelphia; Earl G. Osborn, M.D., New York City; and Carl A. Moyer, Dallas, Texas.

The guests were taken on a tour of the University Hospitals' new Outpatient Building and the Kresge Medical Research Building, the latter to be dedicated in December.

* * *

The Muskegon (Michigan) County Medical Society has developed its own automobile insignia—a modern design of the letters "M.D." superimposed on the words in a neat square "Muskegon County Medical Society." The design was originated by the son of C. L. A. Oden, M.D., of Muskegon—Constantine, Jr., better known as "Shalmy."

* * *

U. S.—State Aid Asked for Medical Care Plans: The House Interstate Commerce Committee (U. S. Congress) has been urged to give early consideration next year to a health insurance bill to provide federal and state grants to assist voluntary non-profit prepayment health plans, according to the Insurance Economics Society of America.

This bill is substantially the same as the measure introduced in 1949.

The plan is based on a fee of percentage of income

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* * *

Wm. J. Burns, Lansing, Executive Director of the Michigan State Medical Society, recently was honored by being made a Vice President of the American Trade Association Executives, an appointment announced by ATAE President Chester C. Kelsey of New York City. Mr. Burns is also on the Board of Directors of ATAE.

* * *

George M. Byington, M.D., formerly of Detroit, recently wrote regrets at his inability to attend the MSMS Annual Session in Grand Rapids. Dr. Byington is now with California's County of Santa Clara Health Department. His address is 2220 Moorpark Avenue, San Jose, California.

* * *

The Rockefeller Foundation reports appropriations of $16,640,355 for the year 1952. Of this amount, $3,599,698 was applied to work in medicine and public health.

* * *

The total number of persons covered against hospital expense, according to the Bureau of Accident and Health Underwriters, approaches the 92 million mark—an increase of 5½ million—7 per cent over 1951.

More than 73 million persons have surgical insurance, an increase of more than 7½ million—12 per cent over 1951.

Approximately 36 million persons are protected under medical expense coverage; this is 8 million more than in 1951—an increase of 29 per cent.

Detailed information is available from the Bureau, by writing L. A. Orisini, 60 John Street, New York 38, N. Y.

* * *

The International Congress of Obstetrics and Gynecology will be held at Geneva, Switzerland, July 26-31, 1954, under the sponsorship of the American Committee on Maternal Welfare, Inc.

* * *

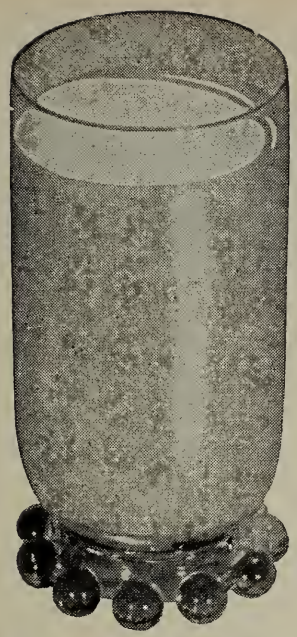
The Annual Clinic Day of the St. Clair County Medical Society was held at the Black River Country Club, Port Huron, on November 11. The program covered "Pediatrics in Practice" with the speakers from the medical faculty of the University of Michigan.

One hundred ten members of St. Clair County Medical Society and of neighboring counties attended the November 11 Clinic.

* * *

On to San Francisco for the AMA. The Union Pacific Railroad invites Michigan doctors to utilize the "City of San Francisco" for a pleasant 39-hour trip from Chicago to San Francisco for the June 21-25, 1954 AMA Annual Session.

The "City of San Francisco" departs from Chicago at 7:00 p. m. and arrives in San Francisco the second morning at 9:15 a. m. For detailed information and reservations, contact F. O. Fokansorka, General Agent, 612 Book Bldg., Detroit 26.



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MIDWINTER SEMINAR, FLORIDA

The eighth annual University of Florida Midwinter Seminar in Ophthalmology and Otolaryngology will be held at the Sans Souci Hotel in Miami Beach the week of January 18, 1954. The lectures on Ophthalmology will be presented on January 18, 19 and 20, and those on Otolaryngology on January 21, 22 and 23. A midweek feature will be the Midwinter Convention of the Florida Society of Ophthalmology and Otolaryngology on Wednesday afternoon, January 20, to which all registrants are invited. The registrants and their wives may also attend the informal banquet at 8 p.m. on Wednesday. The Seminar schedule permits ample time for recreation.

The Seminar lecturers on Ophthalmology this year are Dr. W. B. Anderson, Durham, N. C.; Dr. W. P. Beetham, Boston; Dr. W. C. Owens, Baltimore; Dr. A. B. Reese and Dr. M. C. Wheeler, both of New York City. Those lecturing on Otolaryngology are Dr. E. N. Broyles, Baltimore; Dr. H. P. House, Los Angeles; Dr. W. M. McNally, Montreal, Canada; Dr. Dorothy Wolff and Dr. D. Woodman, New York City.

NORTH SHORE LECTURE SERIES

Members of the Michigan State Medical Society are cordially invited to attend the Fourth Annual North Shore Health Resort Lecture Series. The lectures are being held at the hospital, 225 Sheridan Road, in Winnetka, Illinois, the first Wednesday of every month from October through June (second Wednesday in May) at 8:00 p.m.

The 1953-54 theme is "Treatment in Psychiatry." The first lecture, "The Problem of Psychiatric Referral," was given by Dr. Harold G. Wolff, Professor of Medicine (Neurology), Cornell University Medical College, New York; Attending Physician, New York Hospital, on Wednesday, October 7, 1953.

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Acknowledgment of all books received will be made in this column, and this will be deemed by us as full compensation to those sending them. A selection will be made for review, as expedient.

FOOL'S HAVEN. A novel by C. C. Cawley, author of "No Trip Like This and Other Stories." Boston: House of Edinboro, 1953.

This comparatively short novel is interesting and challenging. It tells of a young man studying engineering who falls in love with the daughter of a widow who dislikes doctors and is a member of an unnamed religious sect which believes that all disease can be cured by prayer. Her tenet is that Jesus Christ was the greatest physician, and anything can be done by prayer, but if the doctor is called in, God will withdraw from the case because proper trust has not been shown.

Several times one of the family has been stricken. The father had undulant fever, and several doctors failed to cure him. This was before the family contact with the prayer-healing pastor. The young girl had an attack of appendicitis early in the acquaintance of the lovers. The young man had been operated upon once for a severe appendicitis, about to rupture. He had read a book and made his own diagnosis, went to a hospital and asked for relief. The diagnosis was confirmed. The mother refused to call a doctor for the girl, and she recovered. Several conflicts occur. Finally, the couple are to be married, and the day before, while attending a party, the bride-to-be is again stricken at the home of an aunt who called a doctor. Diagnosis was acute appendicitis and operation was advised without delay. The girl insisted on being taken to her home where the prayer healer advised against medical care, but called the congregation for prayer. The girl died. Health authorities would not allow burial of a patient who died without medical attention without an autopsy. An inquest resulted in indictment of mother and pastor for manslaughter. The pastor was acquitted and the mother convicted.

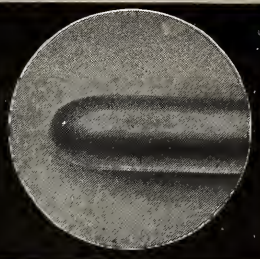
Much law and many controversies are cited. The book is very evidently written for propaganda. It also raises a question of why a mother who follows her pastor's advice not to call a doctor is guilty of manslaughter, while the man who gave the advice is not considered guilty. The publishers submitted many citations. Anyone who wishes may try to solve this old conundrum.

PRACTICAL X-RAY TREATMENT. By Arthur W. Erskine, M.D. Fourth Edition Revised and Enlarged. Saint Paul and Minneapolis; The Bruce Publishing Co., 1953. Price $5.00.

The fourth edition of this book comes from the press posthumously. Dr. Erskine died in December, 1952.

This new edition puts forth the many thoughts and ideas found by the author to be practical in his hands. He covers all the conditions that have been found to respond to the use of radiation. There are several chapters devoted to physics, protection, and some of the social aspects of radiation therapy. It is possible to

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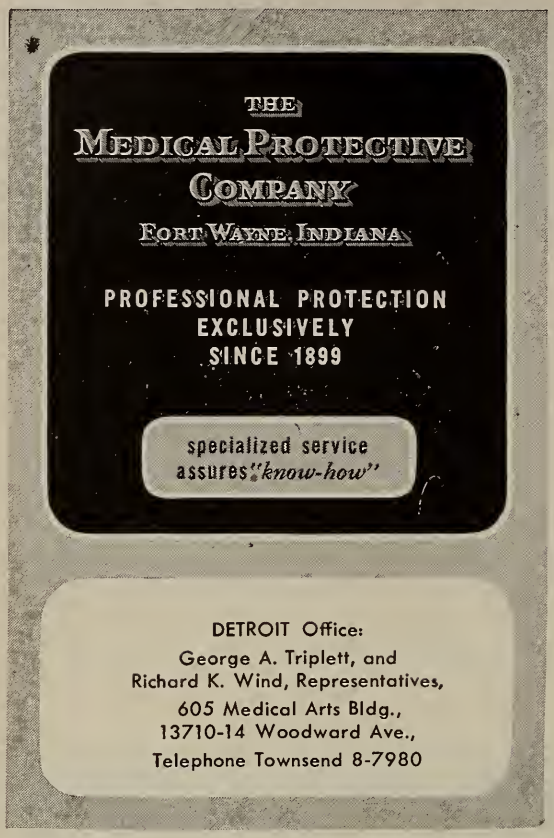
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see many instances where this volume can be of definite value to those doing x-ray therapy.

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G.T.P.

MAY'S MANUAL OF THE DISEASES OF THE EYE. For students and general practitioners. Edited by Charles A. Perera, M.D. 512 pages, Illus. Baltimore: Williams & Wilkins Company, 1953. Price $6.00.

May's Manual of the Diseases of the Eye has been a standard for many years. One of the most compact and usable manuals that we know of. This is the twenty-first edition, and we believe it will be just as popular as its predecessors. It has the usual excellent printing arrangement, with very satisfactory color pictures of the retina.

PHYSIOLOGY OF EXERCISE. By Laurence E. Morehouse, Ph.D. Associate Professor of Physical Education, The University of Southern California; Formerly Research Fellow, Harvard Fatigue Laboratory, and Augustus T. Miller, Jr., Ph.D., M.D. Professor of Physiology, University of North Carolina Medical School. Illustrated, Second Edition. St. Louis: The C. V. Mosby Co., 1953. Price $4.75.

Here is an extremely interesting book on a subject very poorly understood. References and outlines are made of how many of the extensive and detailed studies are made. Exercises under control, measuring oxygen intake, muscle fatigue, changes in body fluids, etc., are mentioned.

The first chapter is a study of the skeletal muscle tissue. There are twenty-eight chapters on such subjects as: The Nervous Control of Muscle Activity; The Metabolism of Muscle; Source of Energy for Muscle Contraction; Oxygen Requirements for Exercise; The Heart; The Heart Rate in Exercise; The Circulation of the Blood; Circulatory Adjustments in Exercise; Pulmonary Ventilation: Gas Exchange and Transport. An idea of the detail of the work is illustrated by the chapter on skills, ten pages. Examples of Skills, Quality of Champions, Factors which limit Skills, Body Weight, Body Height, Timing, Eye Muscle Co-ordination, Kinesthesis, Balance, Reaction Time, Speed of Movement, Precision, Muscular Tension, Visual Aim, Skill Center in the Brain, Learning, Specificity.

Each chapter is followed by from six to forty-seven references. The book also contains a much needed glossary. A most valuable book for physical education, athletics, soldier training and conditioning, as well as for general knowledge.

PEDIATRICS. By L. Emmett Holt, Jr., Professor of Pediatrics, New York University College of Medicine, Director, Children's Medical Service, Bellevue Hospital, New York, and Rustin McIntosh Carpentier, Professor of Pediatrics, Columbia University, and Director of the Pediatric Service in the Babies Hospital, New York, N.Y. Twelfth Edition. New York: Appleton-Century-Crofts, Inc., 1953.

This is the 1450-page twelfth edition of this book. It is completely rewritten and brought up to present-day practice and treatment. Such modern concepts of diag-



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nosis and treatment of disturbances of the fluid and electrolytic balance and mental and emotional development of infants and children are thoroughly discussed in a common sense manner.

We feel that this text is one of the most comprehensive and authoritative treatises ever published. The authors and their sixty-nine collaborators have correlated the subject matter and presented it in a very understandable, easily readable text. The book is well illustrated. It offers a single complete discussion of the field of Pediatrics.

R.J.C.

STEDMAN'S MEDICAL DICTIONARY of Words used in Medicine with their derivations and pronunciation including Dental, Veterinary, Chemical, Botanical, Electrical, Life Insurance and other special terms; Anatomical Tables of Titles in general use, the terms sanctioned by the Basle Anatomical Convention; The New British Anatomical Nomenclature; Pharmaceutical Preparations official in the U. S. and British Pharmacopoeias or contained in the National Formulary; Biographical sketches of the principal figures in the History of Medicine. Eighteenth Revised Edition with Etymologic and Orthographic Rules. Edited by Norman Burke Taylor, V.D., M.D., F.R.S.C., F.R.C.S. (Edin.) F.R.C.P. (Can.) M.R.C.S. (Lon.) University of Western Ontario and formerly of the University of Toronto in collaboration with Lieut. Col. Allen Ellsworth Taylor, D.S.O., M.A. Classical Editor. Baltimore: The Williams & Wilkins Co., 1953. Price $11.50.

Stedman's Medical Dictionary has reached its 18th revised edition with this number. It has been greatly extended and amplified, covering 1661 pages. It is thumb-indexed, printed two columns to a page, in clear type, with black face index words. There are many illustrations, biographical sketches, also derivation and pronunciation of dental, veterinary, chemical, botanical, electrical, and life insurance terms.

It is very complete and usable and can be read without straining the eyes.

NEW AND NONOFFICIAL REMEDIES containing descriptions of the articles which stand accepted by the Council on Pharmacy and Chemistry of the American Medical Association on January 1, 1953. Issued under the direction and supervision of The Council on Pharmacy and Chemistry, American Medical Association. Philadelphia, London, Montreal: J. B. Lippincott Company, 1953.

This volume is an annual publication and gets a little larger as new remedies are accepted. It lists and describes all products accepted by the Council on Pharmacy and Chemistry of the American Medical Association.

A CENTURY OF MEDICINE 1848-1948. The History of the Medical Society of the State of Pennsylvania. Edited by Howard Kistler Petry, M.D. Medical Society of the State of Pennsylvania. Price $5.00.

This is a publication of the Medical Society of the State of Pennsylvania, giving its history from 1848 to 1948. It tells of the historical background of organizing the society, and many stories of interest to Pennsylvanians.

It is a book of over 400 pages, interesting from an historical viewpoint.

Say you saw it in the Journal of the Michigan State Medical Society

CHILDREN OF DIVORCE. By J. Louise Despert, M.D. Garden City, N. Y.: Doubleday & Company, Inc., 1953, Price $3.50.

The author worked for seven years in the Payne Whitney Nursery School in New York. Her purpose in writing this book, she says, is to help save marriages—the marriages of today's children whose parents have failed at marriage. There are 350,000 divorces each year in the United States. There are a million and a half children of divorce under eighteen. Divorce, she believes, need not be disaster.

The author has learned from her files that it is not alone divorce that has created maladjusted children, but the emotional situation in the home, with or without divorce, that is the determining factor in a child's adjustment. She has found that an emotional divorce is much more distressing to children than a legal separation. To prevent some part of this grief and pain, she has written this book in order to prepare parents and children for separation. There are chapters with case histories for safeguarding the child. She presents a child's view of a failing marriage. There is a chapter on the courts and agencies. She closes the book with chapters on "Preparation for Marriage" and "Needs of Children." She stresses the primary need which, beside food and shelter, is love and reassurance.

She presents her material in a pleasing manner, with great understanding of the problem. The book may be safely recommended to all parents of children who are having marriage adjustment difficulties or who are contemplating divorce.

G.K.S.

A CENTURY OF MEDICINE in Jacksonville and Duval County. By Webster Merritt. Gainesville: University of Florida Press, 1949. Price $3.50.

This compact history devotes considerable time to the early years in Jacksonville in the early 1840's with its epidemics, especially the yellow fever epidemic of 1857.

Physicians in the 1870's get consideration, also the Civil War.

Several chapters are devoted to yellow fever in Fernandina and Jacksonville, and the yellow fever epidemic of 1888. One chapter is devoted to the smallpox epidemic of 1883.

Many interesting pioneer doctors are mentioned.

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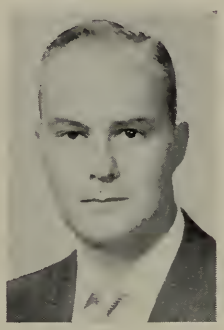
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of the Michigan State Medical Society

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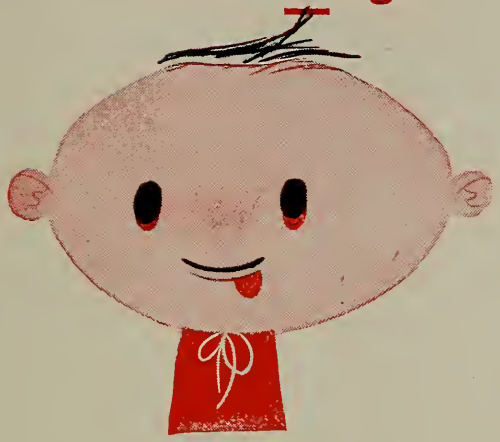
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HEALTH CARE COVERAGE GROWING RAPIDLY

American people in every section of the country are increasing their protection against unexpected costs for hospital, surgical and medical care. The new records reached in 1952 showed cash benefits, flowing from such protection, exceeded two billion dollars. Roughly half that amount was for hospitalization, one-fourth for operation and doctor bills, and the other one-fourth for replacement of income lost due to accident or sickness.

The picture of the total number of persons covered at the end of 1952 is as follows:

Hospital—92 million, an increase of 5½ million (7% over 1951)
Surgery—73 million, an increase of 7½ million (12% over 1951)
Medical—36 million, an increase of 8 million (29% over 1951)
Disability—38 million (a new high mark)

The year 1952 saw the introduction of voluntary health protection designed to meet catastrophic costs of very serious illness. This is called "major-medical" expense coverage. Approximately 700,000 persons have adopted this form of protection. Major-medical coverage takes up where Blue Cross-Blue Shield leaves off, provides maximum benefits ranging from $2,500 to $10,000 and is usually written with a deductible feature similarly to automobile insurance.

The above figures were obtained by the Health Insurance Council in a survey made of Blue Cross-Blue Shield, insurance companies, independent plans sponsored by business and industry, employe benefit associations, and private group clinics.

Conservatively stated, the figures indicate that hospital and medical care protection can be and is being rapidly adopted on a voluntary basis by a major portion of the people of the United States and soon may be expected to reach as large a percentage of the people as any compulsory government plan envisaged.

An additional interesting feature of the survey indicates that in number of people protected by hospital and surgical coverage, the insurance companies have forged ahead of Blue Cross-Blue Shield. In distribution of medical coverage, Blue Shield still leads insurance companies.

COLOR TV AT MCI

The 1954 Michigan Clinical Institute will feature color television of surgical and medical procedures, beamed to the Grand Ballroom of the Sheraton-Cadillac Hotel, Detroit. The daily programs—from 1:00 to 3:00 p.m.—will be sponsored by the MCI Committee on Arrangements in co-operation with Smith, Kline & French Laboratories, Philadelphia, Lewis M. Lang, Director.

The daily TV program will complement the "block system" program of the 1954 MCI. The "blocks" to be featured on Wednesday, March 10, will be surgery and trauma, with individual talks on cancer control and diabetes; on Thursday, March 11, the "blocks" will be on obstetrics-gynecology-pediatrics, and medicine with surgical aspects; Friday's "blocks," featured March 12, will be heart and rheumatic fever in the morning, and general practice-internal medicine in the afternoon.

HIGHLIGHTS OF EXECUTIVE COMMITTEE OF THE COUNCIL

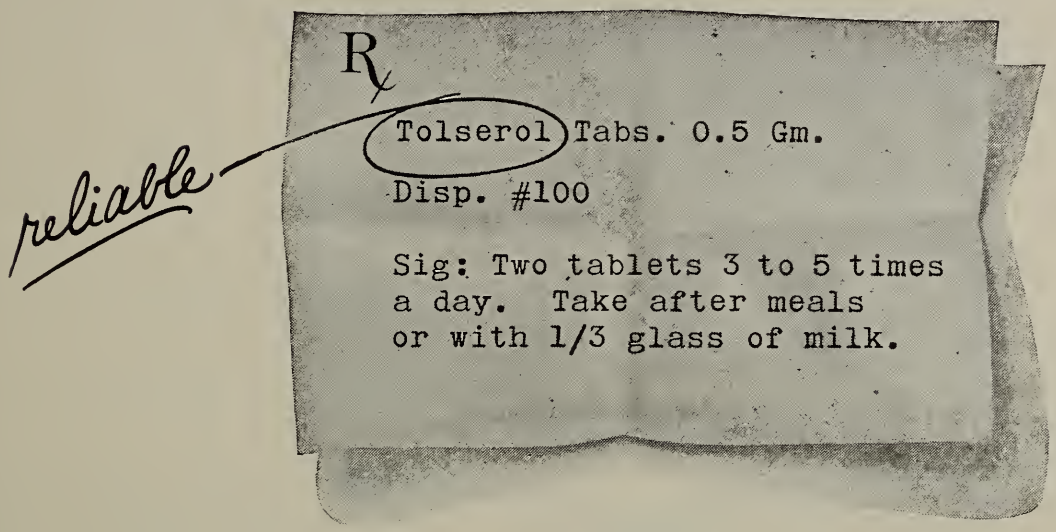
Meeting of October 22, 1953

Seventy-nine items were presented to the Executive Committee on October 22. Chief in imporance were:

- **606 Townsend, Lansing.** The Executive Director reported completion of blacktopping the driveway and parking lot; also that the work of modernizing the entrance and reception room would be completed in about two weeks.
- **Matters referred by MSMS House of Delegates** to The Council were discussed, including: (a) Resolution re American College of Surgeons which was referred to the Legal Counsel for advice; (b) Resolution re Public Relations Funds, which was referred to the Public Relations Committee for study and advice; (c) Resolution re Lowering of MSMS Dues, which was referred to the Finance Committee for study and advice; (d) Motion for study of fees for surgical assistants (Blue Shield)—the Executive Director was instructed to correspond with Michigan Medical Service and ascertain the findings of its survey in other states.

(Continued on Page 1264)

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HIGHLIGHTS OF THE COUNCIL

(Continued from Page 1262)

- **Progress report** on health and accident insurance program for MSMS members was discussed.
- **Follow-up on "Golden Goose" Breakfast** was authorized, including hospital staff and county (or district) medical society meetings arranged by the 18 MSMS Councilors; also a "Golden Goose" meeting to be held during the Michigan Clinical Institute in Detroit, in March, 1954. A similar program, to inform hospital management, is to be recommended to the Michigan Hospital Association and to Blue Cross, for joint sponsorship.

  Discussion brought out that Detroit hospitals have come to an agreement with insurance companies to admit their policyholders into Detroit area hospitals promptly.
- **Committee Reports.** The following committee reports were presented: (a) Emergency Medical Service Committee, meeting of October 7; (b) Advisory Committee to Michigan Hospital Service, meeting of October 7; (c) Michigan Clinical Institute Committee on Arrangements, meeting of October 14.
- **John H. Buell, M.D.,** was added to the Scientific Radio Committee by President L. W. Hull, M.D.
- **Letter from Michigan Health Officers Association,** re interest of Michigan's health officers in the control of heart disease and rheumatic fever, was referred to the MSMS Rheumatic Fever Control Committee, for action.
- **Michigan's Demonstration Project** for the severely mentally retarded—letter from Probate Judge P. H. Mitchell of Barry County, inviting MSMS assistance in this project, was referred to the MSMS Child Welfare Committee for study.
- **President L. W. Hull, M.D.,** was authorized to represent the Michigan State Medical Society at the inauguration of Clarence B. Hilberry, Ph.D., new Wayne University President.
- **Expense of the joint biennial report** of the Michigan Heart Association, co-sponsored by the Michigan State Medical Society, was approved.
- **Allegan County Medical Society** attained the highest percentage of attendance (82.6 per cent) at the 1953 MSMS Annual Session in Grand Rapids and therefore is entitled to a guest speaker at one of its meetings, with the compliments of the Michigan State Medical Society. Congratulations were extended to the Allegan County Medical Society and to eleven other county medical societies which had achieved an attendance of 60 per cent or over at the recent MSMS convention: Kent, Newaygo, Ottawa, Eaton, Barry, Muskegon, Mecosta-Osceola-Lake, Branch, Clinton, Van Buren and Ionia-Montcalm.
- **Reports on the breakdown of registration** by specialties at the 1953 MSMS Annual Session and also at the 1953 Michigan Clinical Institute were presented and were ordered published in JMSMS.
- **Resolution from the Michigan Society of Architects,** congratulating members of the Michigan State Medical Society who erected the Beaumont Memorial on Mackinac Island, was read.
- **Audit of the Beaumont Memorial expenses** was reported by Councilor G. B. Saltonstall, M.D., and referred to State Treasurer D. Hale Brake, for study.
- **A new format in MSMS stationery** was authorized.
- **Copies of the booklet** "Accident and Health Coverage in the United States," a brochure of the Health Insurance Council were studied and are to be sent to all members of the Council.
- **The three Standing Committees** and the other Committees of The Council were announced by Council Chairman William Bromme, M.D., and approved.
- **Public Relations Counsel** H. W. Brenneman presented: (a) a detailed outline of a joint public relations program for MSMS and the individual county medical societies of Michigan; from this composite program, each county medical society may select particular projects most interesting and applicable to its needs and area; (b) Question of a review board for mental hospital patients, and legislation therefor, was thoroughly discussed and referred to the Mental Hygiene Committee for study in co-operation with the Stae Bar of Michigan; (c) Amazing accomplishments of the M.D. Placement Program, a project of the Michigan Health Council, were cited; (d) Report on recent tour of Dr. Wayne Whitaker, Assistant Dean of University of Michigan Medical School, was made. Dr. Whitaker emphasized the probability that material financial assistance to worthy medical and other professional students is being given by individual doctors of medicine, practitioners of this State; a survey on this interesting topic was authorized.
- **The monthly financial reports** and bills payable were studied and approved.
- **A rising vote of thanks** was extended to Dr. and Mrs. H. B. Zemmer, hospitable hosts to the Executive Committee of The Council on this date.

. . . "truly extraordinary" results in intractable bronchial asthma

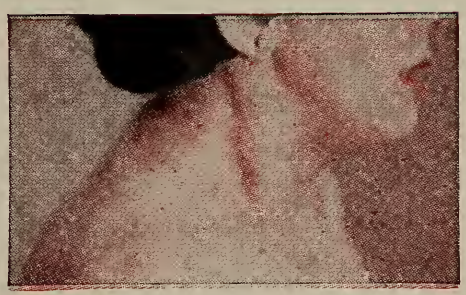
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[1]Evans, R. R., and Rackemann, F. M.: *A.M.A. Arch. Int. Med.* **90**:96–127, July 1952.



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PR REPORT

THE SO-CALLED "FORGOTTEN MAN" in today's health picture will be remembered at the Seventh Annual Michigan Rural Health Conference, scheduled at the Bancroft Hotel, Saginaw, January 14 and 15. He is the industrial worker who lives in a rural area, either in the periphery of a metropolitan community or near the small town selected as a factory site in the growing decentralization program of Michigan industry.

John R. Rodger, M.D., of Bellaire, conference chairman, has announced the theme "Effects of Industry on Rural and Community Living."

The needs and progress in the entire field of rural health will be examined at the conference, but emphasis will be placed on the health problems of the non-farmer in growing rural areas. In the past fifteen years, Michigan has seen almost a half million people leave her cities for farm areas—but not to become farmers.

The Michigan Foundation for Medical and Health Education will financially sponsor the 1954 Rural Health Conference, with a long list of interested groups—among them MSMS—as co-sponsors. All Michigan doctors of medicine are invited to attend this worthwhile meeting, particularly those within easy reach of Saginaw. Delegates from county medical societies will be especially welcome.

CONCERNING THE PORTRAYAL OF M.D.'S in advertising, the Television Code of the National Association of Radio and Television Broadcasters—"Bible" of ethics for the TV industry—states this: "When dramatized advertising material involves statements by doctors . . . or other professional people, the material should be presented by members of the profession reciting actual experience or it should be made apparent from the presentation itself that the portrayal is dramatized."

NARTB has pledged full co-operation in enforcing the code. The American Medical Association has requested all doctors of medicine to note programs having sequences believed to be in conflict with the code. Reports of such violations should be forwarded to the Public Relations Department of MSMS, or to AMA's PR Department.

The TV Code also has sections seeking to eliminate poor taste, and unethical and indiscriminate advertising in the sale of medical products.

"THIS IS YOUR HOSPITAL" SERIES of radio broadcasts, produced by the Michigan Association of Hospital Auxiliaries, has been well-received in pilot broadcasts in the Lansing area, and is scheduled for statewide distribution. The series of five- and 15-minute scripts was written by selected members of the Association who spent months in research and consultation.

FOR EXCELLENCE IN MEDICAL REPORTING, The Council has inaugurated a special MSMS award, to be presented for the first time in a ceremony at the Michigan Clinical Institute in March, 1954.



Selected to receive the first award was Jack Pickering, science writer for *The Detroit Times,* who earned mention for his versatility, his ability to present scientific information in a readable style, and for his revelation of conditions inimical to health and medical practice.

In announcing the project at the 88th Annual Session, Council Chairman William Bromme, M.D., Detroit, gave this outline of criteria set up by The Council: "The award will be presented periodically to Michigan writers who have contributed to public understanding of medicine and health through their accurate reporting of medical and scientific news, their coverage of advances in medical science, and their interpretation of objectives of the medical profession in relation to the nation's health, social and economic welfare."

It was indicated that the award might also be presented to publications or other media responsible for outstanding reporting, as well as to individual writers.

NEW INSIGHT INTO SOME PRACTICAL ASPECTS of medical practice is offered senior class members at University of Michigan Medical School in a series of weekly lectures being presented under direction of R. W. Teed, M.D., Vice Chairman of MSMS' Public Relations Committee. Practicalities, reviewed by physicians actually in private practice, include down-to-earth discussion of medical ethics and attitudes, public relations, and topics related to sociological phase of medicine. Dr. Teed plans to compile and collate talks given this school year, making the series available for future courses. This action by MSMS precedes recommendation at recent AMA House of Delegates session that such courses be instituted in the nation's medical schools.

The JOURNAL

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Treatment and Prophylaxis of Streptococcal Infections for Prevention of Rheumatic Fever

By Harold B. Houser, M.D.

Syracuse, New York

IT HAS BEEN well established that attacks of rheumatic fever are usually, if not always, initiated by a preceding Group A streptococcal respiratory infection. Control of these infections, by either prevention or treatment, has resulted in a lowered incidence of rheumatic fever. In general, there are two population groups in which the problem of prevention of rheumatic fever must be considered. One consists of the general population which has not experienced an initial attack of rheumatic fever; the second is comprised of those individuals who have experienced one or more attacks of this disease. Although the approach to the prevention of rheumatic fever is different in these two groups, the fundamental principle of prevention is based on the susceptibility of Group A streptococci to the killing or static action of anti-bacterial agents. Both the sulfonamide drugs and penicillin are effective prophylactic agents against streptococcal infections. The therapeutic use of either penicillin or aureomycin when streptococcal sore throat occurs will reduce the incidence of subsequent acute rheumatic fever.

From the Department of Medicine, State University of New York Upstate Medical Center and the Kilian Research Laboratory. Supported by a grant from the Masonic Foundation for Medical Research and Human Welfare.

Dr. Houser is Assistant Research Director, Wieting-Johnson Hospital for Rheumatic Fever, Syracuse, New York, and Fellow, Arthritis and Rheumatism Foundation.

Prevention of Initial Attacks

Since the attack rate of rheumatic fever is relatively low in the general population,[1] chemoprophylaxis of streptococcal respiratory infections in this group is not, as a rule, practical. When streptococcal epidemics occur in closed population groups; for example, military establishments, schools, and other institutions; prophylaxis is of value in reducing the expected incidence of rheumatic fever. The greater experience in such instances has been with sulfadiazine. Recent preliminary reports,[3,7] however, indicate that penicillin would also be effective, and, in addition, in adequate doses, it will eliminate the carrier state. This ability of penicillin to eradicate streptococci from the nose and throat would make it the drug of choice in such circumstances. In contrast with sulfadiazine, the appearance of resistant organisms during pencillin administration has not been reported to occur. At the present time, no minimal effective dose of penicillin for the eradication of streptococci from carriers has been established.

An effective method for reducing the incidence of initial attacks of rheumatic fever is the treatment of the preceding streptococcal respiratory infection. Investigations,[8,12] prior to 1949, had indicated that penicillin treatment of acute streptococcal pharyngitis reduced the incidence of rheumatic fever following this infection. Since 1949, extensive studies* have been conducted at Warren Air Force Base to determine the effect of treatment of streptococcal sore throat with either penicillin or aureomycin on the incidence of rheumatic fever. These results have been summarized in a recent report.[10] In a series of over 2,000 patients with streptococcal sore throat the incidence of subsequent rheumatic fever occurring in individuals

*These studies have been reported in part.[9,11,21]

who received penicillin treatment was 91 per cent less than in similar individuals who did not receive penicillin.[10] Aureomycin treatment of streptococcal tonsillitis was effective in reducing the incidence of initial attacks by 81 per cent in a group of 1,400 patients studied in a similar fashion.[10]

Studies performed at the same center indicate that persistence of the carrier state following treatment results in an antibody response of the same order of magnitude as in the untreated patients.[11] Since the attack rate of rheumatic fever in any population with acute streptococcal infections may be correlated with the magnitude of the antibody response,[5] it would appear that the ideal form of preventive therapy would be that which inhibited antibody production to the maximal degree. In these studies penicillin was more effective than aureomycin in reducing the streptococcal carrier state and in inhibiting antibody formation. It thus would be expected that penicillin would also be more effective than aureomycin in reducing the incidence of rheumatic fever.[11]

Prevention of Recurrent Attacks of Rheumatic Fever

Individuals who have had one or more attacks of rheumatic fever are especially likely to develop a recurrent episode of this disease following a streptococcal respiratory infection. Over a twenty-year period at the House of the Good Samaritan in Boston, Massell[15] reports that among rheumatic patients approximately 50 per cent had a recrudescence of rheumatic fever following a streptococcal infection. This figure is in accord with other studies. Thus the importance of controlling streptococcal infection in patients with a history of rheumatic fever is evident.

Many studies have shown that the daily administration of a sulfonamide preparation to rheumatic subjects prevents streptococcal infections and thus prevents recurrent attacks of rheumatic fever. These studies have recently been summarized.[10] When either sulfanilamide or sulfadiazine was administered daily during 1,447 patient-seasons, the attack rate of recurrent rheumatic fever was 86 per cent less than that occurring in 1,739 untreated patient-seasons.

More recently, oral penicillin has been used as a prophylactic agent.[6,13,14] Variations in the manner of administration and form of oral penicillin, plus the small number of patients studied, permit neither a definitive interpretation of the results nor direct comparison with those obtained with the use of sulfonamides. Since penicillin is effective in eradicating the streptococcus from carriers,[20] one would expect that it would be very effective in the prevention of streptococcal respiratory infections.

In the absence of a completely satisfactory regimen for preventing streptococcal tonsillitis or pharyngitis, it is of great importance to recognize the occurrence of these infections in patients with a history of rheumatic fever. Prompt and adequate penicillin treatment of such infections in rheumatic subjects will greatly reduce the recurrence rate of rheumatic fever.[10,16] Massell and co-workers[16] observed only two recurrent episodes of rheumatic fever among twenty-five rheumatic individuals who, when they acquired streptococcal infections, were treated with penicillin. This was in contrast to six recurrences among eleven untreated patients. The two treated patients with rheumatic recurrences showed evidence of persistence of their infecting organism after cessation of treatment and would, therefore, be considered as having received inadequate therapy. As was pointed out previously, eradication of the infecting organism is necessary if adequate inhibition of antibody formation to the streptococcus is to be accomplished. A similar study from the Streptococcal Disease Laboratory[10] showed no recurrences among twenty-two individuals who were treated with penicillin in contrast to four recurrences among twenty untreated patients. Thus, when the data from these two studies are combined, recurrences of rheumatic fever following streptococcal respiratory infection were reduced by 87 per cent when such infections were treated with penicillin.

Comment

Since approximately 40 per cent of streptococcal respiratory infections are either asymptomatic or so mild that medical care is not sought,[18] prophylaxis against such infections rather than dependency upon treatment of these infections once they occur, is the method of choice in prevention of recurrent episodes of rheumatic fever. Patients who have active rheumatic fever, or who have had an episode of rheumatic fever during the past three to five years, should be placed on prophylaxis with either penicillin or one of the relatively non-toxic sulfonamide drugs. In the light of our present knowledge, the American Heart Association has recently recommended the following regimens:

(a) daily oral administration of a sulfonamide in doses of 0.5 to 1.0 gram per day, or (b) daily oral administration of 400,000 to 500,000 units of buffered penicillin G divided into two doses and given on an empty stomach.[17] Daily administration of the sulfonamides is essential for adequate protection. Although a recent report by Kohn, Milzer and McLean[13] indicates that intermittent orally administered penicillin reduces recurrences of rheumatic fever, considerably more evidence must be accumulated before one may safely assume that any method of oral administration other than daily will adequately protect rheumatic subjects. Parenteral administration of penicillin for prophylaxis has now become a practical possibility. Using a new long-active repository penicillin N,N' dibenzylethylenediamine dipenicillin G ("bicillin"), Stollerman and Rusoff[19] were able to show blood levels effective against Group A streptococci for periods up to four weeks after a single injection of 1,200,000 units. Additional controlled studies utilizing this preparation are necessary before its widespread or routine use can be recommended. It does, however, offer a means of circumventing one major objection to oral administration of penicillin—dependence upon the patient for administration of the drug.

Protection against streptococcal infections should begin when the diagnosis of rheumatic fever is established. This protection may be had by rendering the environment comparatively free of danger of streptococcal infections by various control measures, or by individual treatment as outlined above. As a rule, in general hospitals and the home, rheumatic subjects are adequately protected against streptococcal infections only when receiving chemotherapeutic or antibiotic drugs. Penicillin, in dosages sufficient to eradicate the streptococcus from the throat and nose, should be given before routine prophylaxis commences since sulfadiazine and the prophylactic dose of penicillin are inadequate for this purpose. The length of time that it is necessary to continue prophylaxis is dependent upon several factors of which the most important is the opportunity of the patient to acquire a streptococcal infection. Basically, any individual, regardless of age, should be protected for three to five years following an attack of rheumatic fever. In general, after this interval, if there is undue risk of streptococcal infection, prophylaxis should be continued for much longer periods of time. This is especially true of children attending school, and of rheumatic individuals who are in close contact with school age children.

When a streptococcal sore throat occurs in an individual who has a history of rheumatic fever, treatment with penicillin should be started promptly and continued for a minimal period of ten days. The recent study of Brock and Siegal[2] indicates that although early treatment is most successful in prevention of streptococcal antibody formation, there is a reduction in the amount of antibody formed even when treatment is delayed up to five days. Therefore, even if a rheumatic subject is observed late after the onset of a streptococcal sore throat, and has apparently made a clinical recovery, treatment with penicillin still should be administered. Penicillin may be exhibited orally or parenterally. However, in the presence of the great risk of an imminent recurrent attack of rheumatic fever, intramuscular penicillin offers the physician secure knowledge that adequate penicillin is being received by the patient. A suggested minimal dose of parenteral penicillin is the intramuscular injection of procaine penicillin with aluminum monostearate in oil in a dosage of 300,000 units for children and 600,000 units for adults every third day for three doses. A suggested dose of oral penicillin would be 1,000,000 units per day divided into three or four equal doses and continued for ten days. Aureomycin should be reserved only for those patients who cannot tolerate penicillin, and when it is used, a careful search should be made for evidence of clinical or bacteriological relapse following therapy. Since eradication of the infecting organism is of great importance in preventing recurrences of rheumatic fever, it would be well also, to follow penicillin-treated patients with cultural studies to determine if eradication of the organism has occurred. If it has not, prompt retreatment should be instituted.

In the general population, it is usually not practical to treat streptococcal respiratory infections for periods as long as ten days. To insure adequate treatment in this group, however, effective blood levels of penicillin or aureomycin should be maintained for six to seven days. The choice of drug, and route of administration, is dependent on several factors. As mentioned above, parenteral administration assures the physician of adequate dosage. Disadvantages of this manner of administration are the necessity for return visits and the discomfort of an injection. The former disadvantage may be obviated if the newer long-acting

preparations of penicillin prove successful. Because of the gastrointestinal symptoms which may occur in up to 45 per cent of patients taking aureomycin,[4] many individuals will discontinue this drug prematurely. The greatest advantage which penicillin has over aureomycin is its ability to eradicate streptococci from the throats of a larger proportion of patients with streptococcal respiratory infections.[11] This advantage would make penicillin the treatment of choice.

Streptococcal pharyngitis or tonsillitis can be recognized in many instances. The criteria, in order of value, which are the most useful in establishing the clinical diagnosis of streptococcal sore throat are as follows. In a large number of patients exudate is present on the tonsils or pharyngeal wall. The anterior cervical lymph nodes, and especially those at the angle of the jaw, are usually enlarged and tender. The onset of the illness is sudden, with soreness of the throat on swallowing, chills, feverishness, and other constitutional symptoms such as headache, myalgia, and vomiting. A blood count will usually show a leukocytosis. The pharynx and uvula often show a diffuse bright redness and edema.

The diagnosis, of course, can be confirmed, in most instances, by the presence of a predominant growth of Beta-hemolytic streptococci in a culture obtained from the throat. However, the above clinical findings are sufficient to establish a presumptive diagnosis of streptococcal sore throat and to indicate institution of treatment in the absence of facilities for bacteriological diagnosis. In rheumatic subjects initiation of therapy should not wait until the results of a throat culture are obtained.

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Heart Disease in Mid-Life

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HEART DISEASE in and beyond mid-life is associated with fundamental changes in the body and a consideration of the subject is extremely important because mid-life represents a period in which conditions occur that cause the development of heart disease in many individuals. The increase in the incidence of heart disease at this period is manifestly greater than in any previous decade. There are a number of direct and indirect reasons for the occurrence. One, especially, is that more people live longer, due to the practice of better scientific medicine at an earlier age.

Looking at the problem clinically, we can readily see that there are two methods of approach to problems of health of older people. One approach is to wait until heart disease is upon patients; to treat them as indicated by giving digitalis, nitroglycerin, diuretics and oxygen tents, et cetera, or perhaps to see them pass into states of health for which nothing can be done. The other method is an attempt to understand some of the causes of heart disease reflected by chemico-pathological changes which lead to diseases of the heart, and to do something about them. The former method was the approach to pediatric medicine 100 years ago when 50 per cent of all children who were born died. Physicians knew well that these children died of diphtheria, scarlet fever, smallpox, et cetera, but they did not understand that the cause was a streptococcal infection, diphtheroid bacilli infection or virus infection. Neither did they understand the lack of immunity of children to infection, nor general techniques for controlling nutrition. Medicine finally came to realize that one of the weaknesses of youth was a lack of immunity and took measures to counteract this bio-physical phenomenon. Today, with heart disease in mid-life, we are somewhat like the practitioners of 100 years ago who were treating scarlet fever, but who had no knowledge of the causes underlying the disease which they were seeking to control.

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In this discussion, the major causes of heart disease in and beyond mid-life will be evaluated. It is well known that arterial disease is the first major cause of heart disease in this period, with hypertension perhaps as the second cause. Therefore, to discuss heart disease in and beyond mid-life, one must evaluate some of the causes of arteriosclerosis and hypertension.

Present thought as to the cause of arteriosclerosis is not exactly clear. If one seeks to evaluate the condition, he finds that it is not only an old man's disease, but youth may have it too; also, that it is no longer something about which nothing can be done, but that it is closely associated with disturbed nutrition of the body which may, in part, be corrected. Medicine is coming to realize that diseases of individuals past mid-life, in many instances, are diseases of disturbed nutrition and reduced tissue function. Since the cause of arteriosclerosis, to a degree, is a metabolic disease, it is becoming increasingly clear that it may be within the realm of control.

Too little is known of metabolism and exhaustion of different tissues associated with age or biological weakness. One of the factors that has been commonly associated with arteriosclerosis, both experimentally in the animal and clinically, is a faulty lipid metabolism. Other conditions, that have also been associated in the experimental animal, are deficient thyroid function, deficiency of the islands of Langerhans and of the sex glands, especially the female sex hormone.

The experimental production of arteriosclerosis in *herbivora* and in *omnivora* has emphasized the importance of lipids, and of reduced thyroid function. In recent years, Louis Katz, of Chicago, and others have shown that fowls may develop arteriosclerosis under conditions of abnormal lipid feeding. Dogs have been used for the past ten years as laboratory animals for such studies by disturbing their lipid metabolism and thyroid function. Students of the problem have shown that certain endocrine and therapeutic substances may have an inhibiting effect on the occurrence of arteriosclerosis. The influence of the thyroid gland and iodine would seem to be one factor, and activity of the sex glands, especially of the estrogen element, would appear to be a second factor.

The relationship of vascular degeneration occurring in man, under conditions of hypofunction of the thyroid gland, can be determined by three

techniques: (1) the removal or destruction of the thyroid gland in man for therapeutic reasons, followed by removal of the individual to the autopsy table and study of his blood vessel; (2) noting the influence of thyroid feeding on the incidence of some forms of clinical manifestation of arteriosclerosis in a group of middle-aged people who need thyroid, and comparing the findings with a control group of patients who are not treated; (3) comparing the change in thyroid function at different age periods with the development of arteriosclerosis and heart disease.

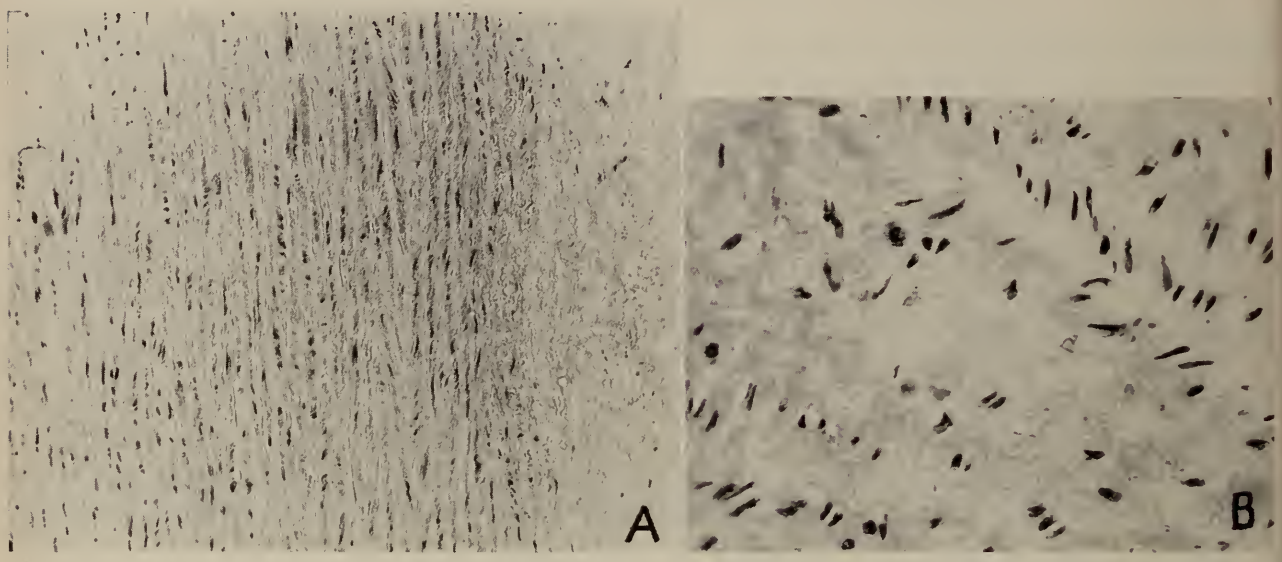


Fig. 1.

Figure 1*A* is a photomicrograph of the aortic wall of a seventy-six-year-old man whose metabolism was normal for years before death. The media are well preserved. Figure 1*B* is a photomicrograph of the aortic wall of an individual who had his thyroid completely removed. This individual is from a group of five cases which were followed after therapeutic removal of the thyroid gland. Three of the individuals, as reported previously, died with ruptured aortas,[10] one died with a ruptured coronary artery, coronary thrombosis and extremely advanced arteriosclerosis,[6] and one is still living. The latter has taken thyroid substance. Cystic degeneration of the muscles of the body may occur in hypofunction of the thyroid gland,[3] and the blood vessel walls show this change.

TABLE I. PATIENTS WITH LOW METABOLISM FOLLOWED FOR A PERIOD OF YEARS

	Number Patients	Average Age	Average BMR	Number of Patients with Clinical Evidence of Arterial Degeneration	Vascular Accidents Occurring in Patients During Period of Observation	Percentage of Patients with Vascular Accidents During Period of Observation	Cardiovascular Deaths During Period of Observation
Group I							
Business Executives treated	27	55	—16.5	15	1	2.7	0
Business Executives untreated	20		—16.2	11	6	30	3
Group II							
Office Patients treated	157	61	—16.8	131	9	3.6	5
Office Patients untreated	42		—16.4	29	10	23	8
Group III							
Infirmary Hospital Patients treated	26	67.3	—17.9	26	11	41.8	10
Infirmary Hospital Patients untreated	16		—18	16	12	74.4	12

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Table I shows the incidence of cardiovascular disease, particularly coronary thrombosis and intracranial hemorrhage, in three groups of individuals. Group 1 consisted of business executives, part of whom were treated with thyroid, and part of whom were used as controls by their own selection. The percentage of vascular accidents in the younger age group of forty to sixty years, averaging fifty-five years, was considerably less in the treated than in the untreated individuals. The same variation

was noted in individuals with low metabolism among office patients who were treated but who, on the average, were older. The oldest group of individuals, whose age averaged more than sixty-

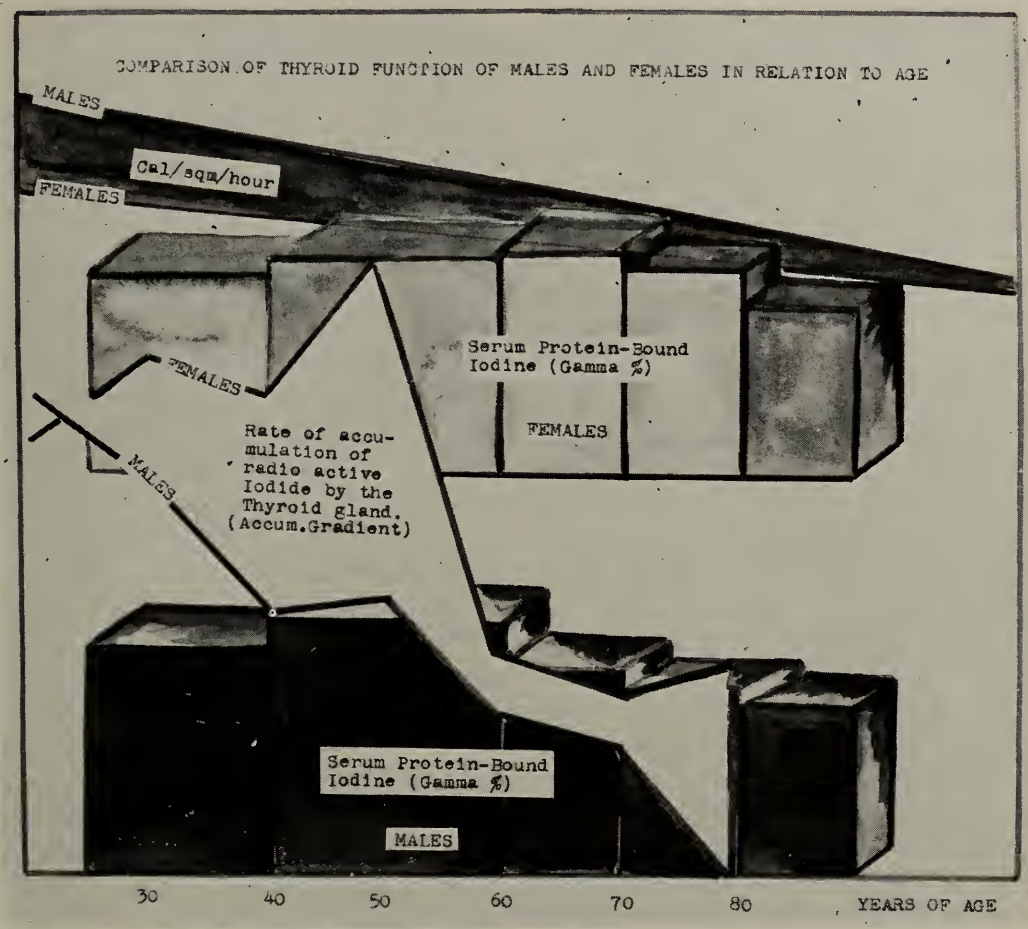


Fig. 2.

seven years, showed less influence of thyroid feeding on the incidence of manifestations of arteriosclerosis than did the younger groups. There was a significant difference in all groups, however.[7]

Figure 2 compares the result of decreased thyroid function as manifest by : (1) the rate of oxygen consumption; (2) the serum protein-bound iodine;[9] (3) the radioactive iodine uptake of the thyroid gland as they occurred in men and in women. The radioactive iodine curve reveals a reduced uptake of the substance by the thyroid gland.[11] Dock[2] noted that the incidence of degenerative heart disease begins well before the age of twenty in men; whereas in women, heart disease does not begin until the age of forty or later.

The evaluation of the fat factor in the blood by one of the techniques used at present is desirable in clinical studies. Whether the S_f 10-20 factor of Gofman[4] is any better than the cholesterol level is disputed.[5] Observers have found that hypofunction of the thyroid gland, diabetes, low estrogenic function, and nephrosis, may lead to changes in the plasma which are believed to predispose individuals to arterial sclerosis and coronary artery disease. The recent work of David Barr, of New York, has shown that there is a definite abnormal lipoprotein pattern in many individuals with coronary artery disease.[1] He has shown that the pathological patterns may be changed by the administration of sex hormones, particularly estrogen. By the zone type of electrophoresis it has been found that individuals with low estrogen content, as manifest by smears of epithelial cells from the vagina, have an abnormal lipoprotein pattern which is modified by the administration of estrogen to the point of change towards that found in younger individuals. In a series of studies of elderly women who had been caused to menstruate over a period of years, anatomical studies were made of their coronary arteries and uterine blood

vessels. It has been found that the blood vessels of the uterus and heart showed what is interpreted to be a lessening of the arteriosclerotic process, commonly found in the older individual.[8]

A thought in the approach to the prevention of heart disease past mid-life is that it is not a manifestation of a local disease but is an over-all body change, particularly with regard to nutrition. This seems to be in line with the general trend of knowledge in medical progress in which most chronic disease processes in the body show no specialization; that is, they do not attack a single tissue, but all tissues are involved, although some are more vulnerable than others. Thus, by proper evaluation of individuals, it seems likely that different diseases, such as coronary heart disease, may be detected long before heart disease need develop.

The disturbed mechanism which begins within the body, associated with reduced gland function, may be dependent upon heredity in part, but other factors play a rôle in producing heart disease. Thus habits that are acquired by individuals are important from the standpoint of advising the patient. Smoking is definitely deleterious and the over-use of alcohol also. It has been pointed out by Roth[12] that the use of tobacco may produce vascular disease, and may be a contributory factor to coronary artery disease. Occupation, habits, and lack of emotional control in everyday life may weaken a diseased coronary artery system. Over-indulgence in foods, particularly fats, rich foods and sugars, tend to exhaust the process of proper digestion and assimilation of foods. The inability to utilize sugar may produce a biological strain on the body of the older individual, though he may not be diabetic, and can be a factor in production of heart disease. Reflexes arising from visceral disturbance may cause coronary heart disease in hearts that have otherwise no symptoms. Such consideration must be given when pathological gall bladders, and other visceral diseases are found. Therefore, it must be said that in control and prevention of heart disease, in and beyond mid-life, all basic physiological states must be evaluated by the physician; defects recognized, and attempts made to adjust them.

In mid-life, and particularly beyond, individuals develop an inability to maintain adequate nitrogen balance. This inability is reflected throughout the entire organism, and it is necessary, therefore, to consider this in treatment or prevention of heart disease. It is necessary for the individual to maintain an adequate protein diet, as well as to supply substances which will cause proper conservation of protein.

High blood pressure plays a rôle in the occurrence of heart disease. There are two factors in hypertension: (1) the production of renin and angiotonin due to anoxia of tissue, particularly by the kidney, which is the humeral mechanism for its cause; (2) the sympathetic nervous system which controls the tension that many individuals with hypertension develop.

The recent work of Dr. Henry Schroeder has pointed out that the use of two substances, hexamethonium, which is an automatic nerve depressant, and apresoline, which neutralizes the angiotonin produced by the anoxia, may be used to control severe high blood pressure. Experience with this material shows that it does have a very definite place in the control of hypertension, and that one may reduce the incidence of heart disease, due to increase in blood pressure, by proper administration of these substances.

The problem in individuals, in mid-life and beyond, of a disturbed fat metabolism, for which the use of lipotropic agents has been recommended, should be considered. Tucker and Eckstein[13] have shown that any lipotropic effect of food, if present, is dependent upon the content of the amino acid methionine. The proper maintenance of adequate protein in the diet of individuals in the mid-phase of life is thus re-emphasized. Choline, methionine and betaine seem to be the three naturally occurring compounds that are capable of preventing or at least alleviating fat in the tissues. It may be important, it is believed, that those people who have exceedingly high lipoproten levels, as manifest by the cholesterol, or by the S_f 10-20 factor of Gofman or the B_2 globulin in the electrophoresis pattern, should receive lipotropic substances. Bile salts and good protein are as good lipotropic factors as the many lipotropic compounds on the market today.

One may summarize by saying that the biochemistry of the body is an important approach towards control of heart disease in individuals past mid-life. The therapy should begin at the age of forty, with a careful history, physical and laboratory examination at yearly intervals, and careful evaluation and maintenance of the health of the entire organism particularly of the metabolism of the individual. Thyroid therapy should be given when studies show it to be needed, which is the case more

often in men, at an early age, than in women. The administration of large doses of thyroid, that is 1 grain or more, tends to reduce thyroid function and to depress the activity of the gland which is not advisable. Small doses of thyroid are more physiological, that is ¼ to ½ grain daily, than are large doses. The smaller doses protect rather than depress the thyroid function. Adequate iodine administration of either organic or inorganic substances is definitely indicated. In those individuals who have deficient estrogen content of the body, as manifest by epithelial smears, the administration of the female sex hormone by mouth in both men and women in small doses is advisable. Estrogens have an additional influence upon the rate of oxygen consumption of the body, and as well, according to Barr, aids in the control of the build-up of a normal balance of the lipoprotein in the blood. Anatomically, it has been found that the administration of estrogen improves the state of the blood vessels in the uterus and in the heart of elderly women. The administration of androgen, too, plays an important role in maintenance of protein balance in individuals with circulatory disease. The need for this substance may be determined in men by measuring the acid phosphatase in the prostatic secretion.

The importance of the diet must be considered as a factor in controlling heart disease in individuals past mid-life. The limitation of fat in those people who tend to have an increase in the blood cholesterol level, and those who tend to be obese, is important. In the limitation of fats and sweets, the latter is particularly important since sweets produce a strain on body metabolism and have no food value except for immediate energy production and for increase in calories which are stored as fat. In the control of heart disease it is well known that obesity should be avoided.

It is advisable for all individuals whether they have arteriosclerosis and hypertension, or not to avoid the excessive use of salt. The control of severe hypertension may be brought about by the use of the antihypertensive drugs previously discussed. Our best results have been with hexamethonium and apresoline.

Personal advice to individuals in the mid-life period about activity is important. Physical activity should be encouraged in those individuals who do not have severe cardiac conditions. Such activities as golfing, fishing, walking and other outdoor exercise, when possible, should be suggested; indoor exercise, such as swimming and bowling should be encouraged when it is not possible to be out of doors. It is my opinion that the middle-aged heart rusts out rather than wears out. If the individual is in good health, exercise will be beneficial. Adequate rest must be encouraged, and advice concerning stress and strain of both physical and emotional states should be given. These problems are usually individual, and should be so treated by the physician.

The question of retiring from work is important. In my opinion, the individual should not completely retire unless he has definitely failing health, but he should change to lighter and less difficult work, commensurate with his physical condition.

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Effect of Cortisone on the Size of Experimentally Produced Myocardial Infarcts

Further Studies

By Aran S. Johnson, M.D., Robert A. Gerisch, M.D., Fred W. Girton, M.D., Schayel R. Scheinberg, M.D., and Harry C. Saltzstein, M.D.
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EXPERIMENTALLY produced myocardial infarcts in dogs treated with cortisone have shown a much smaller area of residual fibrosis than control animals.[2,3] The idea for this work came when Dr. Aran S. Johnson was evaluating the effect of pericoronary neuronectomy on revascularization of the myocardium, following experimentally produced myocardial infarction in dogs. The results of the latter experiments, however, were obscured by massive pleural and pericardial adhesions. Hence, since previous work[4,5] had shown that cortisone decreased the formation of intra-abdominal adhesions, it was felt that cortisone might also reduce pleural and pericardial adhesions. The animals treated with cortisone showed not only a decrease in pleural and pericardial adhesions, but also revealed a much smaller area of residual fibrosis in their myocardium. With this finding in mind the present study was undertaken.

Procedure:—Mongrel dogs weighing 25-45 pounds are anesthetized with intravenous sodium nembutal (1cc. per /5 pounds body weight). Pressure oxygen is given through an endotracheal tube. The heart is exposed by a left thoracotomy with removal of a portion of the fourth rib. After opening the pericardium, the anterior descending branch of the left coronary artery is doubly ligated with trible "O" silk; some are ligated low (one and a half cm. below the origin of the circumflex branch). Some are ligated high (one half cm. below the origin of the circumflex branch).

All animals are kept at cage rest, and sacrificed at varying intervals, at which time gross and microscopic examination, and serial sections of the heart are made. The coronary vascular bed is studied by x-ray injection technique.[1] Electrocardiograms are taken before, during, and serially, after surgery. Cortisone is given intramuscularly.[3]

The animals are divided into six groups.

Group I consists of those animals in which a low ligation was done. Immediately following ligation cortisone (12.5 mg.) was given and continued twice a day for fourteen days, at the end of which time the animals were sacrificed for study.

Group II animals were those in which a high ligation was performed. Cortisone (20 mg.) was given immediately following ligation and continued twice daily for twenty days. These animals were sacrificed on the thirtieth postoperative day.

Group III was also a group of "high ligation" animals, but cortisone (20 mg. twice daily) was limited to seven days. On the tenth postoperative day they were sacrificed.

Group IV animals were treated with cortisone and ACTH for periods varying from fourteen to ninety days, but did not have their coronaries ligated.

Group V included animals treated with cortisone (50 mg. daily) for seven days, at the end of which time a high coronary ligation was performed. No cortisone was given after coronary ligation, and the animals were sacrificed on the fourteenth postoperative day.

Group VI consists of a series of "high ligation" animals as follows: (1) treated with cortisone (50 mg. daily) postoperatively, (2) controls receiving no cortisone postoperatively. A control and treated animal was sacrificed at daily intervals to study the comparative microscopic picture of healing in the treated and control animals.

Results

The size of the area of residual fibrosis was much smaller in the treated than the control animals. In Group I, the average size of the area of fibrosis in the seven control animals was 7.28 cu. cm., and 0.96 cu. cm. in the seven treated animals. Group II, nine control animals had an average area of fibrosis of 19.63 cu. cm., while the nine treated animals revealed little to no fibrosis, with an average area of fibrosis of 0.15 cu. cm.

Cortisone decreased the mortality of experimentally produced myocardial infarcts. A total of ninety-four dogs have been studied. In forty-two control dogs the mortality rate was 50 per cent. Two animals died within fifteen minutes after the coronary artery was ligated; fourteen animals within thirty minutes; two animals within twelve to forteen hours, and one animal on the first, second and third postoperative day. Of twenty-nine animals which were treated immediately postoperatively with cortisone, only 21 per cent died. Two deaths occurred within fifteen minutes after cor-

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From the Departments of Surgery, Medicine, and Pathology, Harper Hospital.

Read by Robert A. Gerisch, M.D., at the Michigan Clinical Institute, Detroit, Michigan, March, 1952.

onary ligation; two within thirty minutes, and one on the first and second postoperative day. The animals which received cortisone before their coronary artery was ligated revealed an even lower mortality rate of 4 to 13 per cent. One of these animals died within fifteen minutes; one within thirty minutes; and one on the third postoperative day. Two of the latter deaths were considered to be unrelated to the myocardial infarct in that one was due to uncontrollable hemorrhage, and the other due to septicemia; hence a corrected mortality rate of 4 per cent.

The coronary vascular bed was studied by x-ray injection technique in both the coronary ligated and the coronary non-ligated animals. In both instances, the hearts of animals treated with cortisone or ACTH demonstrated a much more vascular myocardium throughout as compared to the control animal. Also in the coronary ligated animals, the treated animals revealed a more prominent blood supply, and a greater number of intercommunicating interarterial anastomoses in the infarcted area, than the hearts of the control animals.

Gross examination of serial sections through the hearts of coronary ligated control animals shows an eccentrically placed left ventricular cavity which occurs as a result of fibrosis and thinning of the ventricular wall in the area of infarction. The hearts of the cortisone treated animals have a concentric ventricular cavity without an area of thinning in the involved area.

Microscopic examination of the hearts of animals sacrificed at daily intervals reveals a basophilic staining type of coagulation necrosis which is present in the control and treated animals during the first twenty-four hours postoperatively. After this time it is not seen in the treated animal, but continues to be present in the control studies up to the fifth day. Thromboses of the small vessels were seen in the control animals, while none were seen in the treated animals.

In the entire series of cortisone treated animals, there were no adverse effects such as rupture of the myocardium or aneurysmal dilatation.

Electrocardiograms (standard, augmented unipolar, and V leads) revealed ectopic beats to occur in 76 per cent of both the control and treated animals. Auricular fibrillation was present in five control and four treated animals for two to three days postoperatively. Three control animals, three animals treated postoperatively, and two animals treated preoperatively died of ventricular fibrillation. Whether any of the large number control which died within thirty minutes following coronary ligation, had ventricular fibrillation is not known. In both the control and treated animals, "T" wave inversion began between the first and second postoperative day, and between the fourth and sixth days the "T" wave was waning. A more detailed report of these findings will be made.

Clinically, the cortisone-treated animals seemed to respond sooner from the anesthetic and appeared to be in a state of physical well-being in a shorter period of time, compared to the control animals which were slow to respond and were not interested in food or in the general enviroment.

In conclusions we would like to point out that at the present time we do not know what the effect in humans will be, and that until further studies can be done in this regard, no clinical application can be inferred.

Summary

1. The beneficial effect of cortisone on experimentally produced myocardial infarcts appears to be vascular in nature, as revealed by an increased vascularity in the x-ray injections of the coronary bed.

2. Cortisone decreased the mortality rate of experimentally produced myocardial infarcts in dogs if given either immediately postoperatively, or for a period of time preceding the operation.

3. The area of residual fibrosis resulting from experimentally produced myocardial infarcts in dogs can be decreased markedly by treating the animal with cortisone.

4. The incidence of ectopic beats and arrhythmias were the same in treated and control animals.

5. Histological studies reveal less basophilic staining coagulation necrosis in the treated animal. Thromboses of the small vessels were seen only in the control animals.

6. Clinically the animals seemed to improve more rapidly and recover sooner from the anesthetic.

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(Continued on Page 1305)

Role of the Physician in the Employment of the Cardiac Worker

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THE INDIVIDUAL with heart disease has proved himself to be an able, safe, and faithful worker.

During the acute manpower shortage which prevailed at the time of World War II, employers had an opportunity to gain experience in the employment of persons with limited physical capacities. This experience was surprisingly good. As testimony to this were reports by such men as Crain of Eastman Kodak Company, Poole and Bert of Lockheed Aircraft Corporation, Carlisle and Gibson of Merck and Company, Edwards and Feil of the Erie Railroad Company, and Irvin of the Cadillac Motor Division, General Motors Corporation.

A study by the Bureau of Labor Statistics of the U. S. Department of Labor can be cited as typical. Observations were made on 1,840 workers with heart disease, who were matched as to age and experience with 3,055 unimpaired workers performing jobs of the same type. The cardiac worker had a slightly higher rate of absenteeism than the control group, but this difference amounted to only two and one half days more per year. On the other hand, the cardiac group did not display greater proneness to disabling or nondisabling injury, and what is more significant, they outproduced the healthy controls by an average of 2.4 per cent.

In our everyday professional practice, we are apt to get into the habit of thinking in terms of what the cardiac illness has taken away rather than what remains. The private physician views his patient as an economically independent unit; to the industrial physician he is an integral part of a complex industrial organization. The objective of the physician, whether he be within or without industry, is the same—gainful employment for the worker with heart disease. I have observed that the physician in industry, when considering his work in the light of that done by physicians about him in his community, has at times been inclined to underestimate its importance. Being associated with industry on a part-time basis, I might be better qualified to view it in its proper perspective. I shall quote from one of my periodic newsletters which are sent to the physicians and factory managers of the General Electric Lamp Division. This letter was pitched with the accent on the importance of the physician in industry. I quote:

"In this never-ending struggle of management wishing the maximum performance of its workers, and workers wishing the maximum of profit for their labors, the physician occupies a position midway, able to assist both to accomplish these ends. His assistance consists not so much of the skill he exercises in the treatment of occupational injuries or illness (although this is important), but by a positive, dynamic approach to the prevention of these accidents, and protection against toxic health hazards.

"With equal interest and enthusiasm the physician in industry naturally turns to such other matters as health counseling and health education, attention to the subtle, stressful effects of noise, color, and temperature; the practice of selective job replacement permitting the acceptance of those with physical limitations, and finally, constructive health maintenance programs through the periodic and pre-placement physical examination."

I conclude: "It is through the constantly expanding horizons of preventive medicine and by the general application of these techniques to industry that the physician enjoys an enviable opportunity of leadership in plant and community health enterprises."

Industrial medicine has indeed come a long way from the limited "iodine swabbing and aspirin dispensing" approach so popular not many years ago. If my appraisal is the correct one, the physician in industry working actively with his colleagues in the community, holds the key which spells success or failure to any program for the employment of the cardiac worker.

Now let us see what is being done to accomplish this end. The physician is creating a receptive climate for the worker with limited capacities. He is doing this by an attitude of "eloquence." I use "eloquence" here as Mark Twain did when he said that "Eloquence is enthusiasm for the things a man

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believes in." The physician himself must, of course, be sold first. I remember a few years ago an industrial physician said to me, "Give me only the healthy worker; let those with heart disease go where there are no pre-employment examinations." Nothing can be more wrong. Where does one find this healthy worker—this modern Hercules? It is a myth, as Hercules himself. There are no perfect job applicants—each has some handicap either intellectual, emotional, or physical. The capacities for work vary greatly from one individual to another. No one is able to handle all jobs, or looked at another way, everyone is handicapped for all jobs.

The cardiac worker has his limitations, to be sure, but they are qualitative and not quantitative. To permit these people to work in industry without medical supervision is to place their lives in jeopardy, a burden not only on the immediate employer, but on industry as a whole—for a worker has been lost—a loss, to quote Mr. Charles E. Wilson, "this nation cannot afford." (That's "Electric Charlie," not "Engine Charlie"). Today, most physicians realize that if we are to be successful in our approach to the patient with heart disease, we must see him not just out of the sick room to a life of rest and leisure, but beyond this to productive employment in competitive industry.

Today, with more of our young men seeking higher education and often with an additional delay of three to five years for military service, productive work is frequently delayed until age thirty as opposed to sixteen or eighteen two or three decades ago. Retirement at a fixed chronological age is becoming more popular right along. This inevitable floor and artificial ceiling means that the average industrial worker has fewer productive years, and what is more important, he is, during this period, supporting an increasing number of nonproductive members. So that this burden will not become too great to carry, and to provide the necessary manpower for the great expansion visualized by our industrial leaders in the next decade, we shall need every potential worker, weak or strong, each performing his job within the limits of his own work capacity—selective job placement on a national scale.

Management alone cannot be expected to assume this receptive attitude toward the cardiac worker—labor and public must give their co-operation too. Management must have adequate protection or at least know where it stands, in connection with recent trends to liberalize the interpretation of state workmen's compensaion laws. By way of illustration I should like to refer to several recent cases which have appeared in Ohio Courts.

On April 29, 1946, the decedent suffered a fracture of the proximal phalanx of the right first toe. On June 3, 1946, he died of an acute myocardial infarct. A physician testified in this case as follows:

"In my opinion the medical factors entering into this are that it is a known and proven fact that this man had heart pathology prior to April 29, 1946. After receiving injury to his right great toe, a cast was applied. This incapacitated him from moving around.

"It is a well-known medical fact that when a man has a heart condition such as this man had, when they are incapacitated from their regular line of work, the circulation is very much impaired and any existing pathology is aggravated. His death was the result of heart failure and impaired circulation. He could not move around and keep up his normal circulation and this caused the coronary thrombosis in one branch of his coronary arteries, and that resulted in his death." The physician was asked, during the cross-examination, if in a condition of this kind he would normally prescribe rest. He replied, "No, you certainly would keep him active. Bed rest would be the worst thing. That is what killed this man." Although the case was settled in favor of the decedent, I don't believe that many of us would agree with this opinion. But wait—there is more.

Within a few months the same employer had a somewhat similar case. The decedent collapsed at home on August 18, 1948. The death certificate showed coronary thrombosis. An application was filed alleging that in June or July, 1948, the decedent came home with an injured foot. Although the decedent continued to work right up to the time of his death, his widow testified that the foot often bothered him at night and that she continued to treat him with hot soaks and other home remedies. At no time did he seek medical attention either from his personal physician or at the company dispensary.

Medical testimony in this case from the *same* physician against the *same* employer was as follows: "The man should have gone to bed. He had the injured toe and although it was not severe enough to require medical attention, the hard work

put additional strain on his heart, aggravated the pre-existing heart condition and caused his death."

To this day this employer doesn't know whether these patients should be kept in bed or put to work as hard as they can.

To confound matters further, let me cite still another case—McNees v. Cincinnati Railway:

The claimant was employed as a driver of a trolley bus and was on duty the night of January 17, 1944. The night was very foggy. As he drove his bus down town the fog was so dense that a passenger stood on the front step of the bus to direct the decedent in avoiding the curb and parked cars. The decedent seemed excited before he started on the trip, which excitement continued as he proceeded down town. About a mile from the end of the line, the trolley poles were pulled off the wires because the bus was driven too far to the left. The decedent tried to get them back on, without success. The bus following tried to give assistance when it came upon the scene. As the second bus started to push the stalled bus, the first bus moved only about four feet when the brakes seemed to set. The driver got out and found the decedent had collapsed over the steering wheel. He was removed to the hospital where he was pronounced dead, the cause of death being "coronary thrombosis." The decedent had suffered from a heart condition for about a year prior to January 17, 1944.

The plaintiff, to support her claim, called a doctor who testified that McNees' death was due to the tremendous strain that was placed upon this individual's physical and mental being.

The defendant's expert medical witness testified that the anxiety and nervousness, more than the physical strain, was the cause of death. He said:

"I can safely say that a majority of coronary conditions result not from physical exertion as much as from mental strain or some other condition which we don't know."

The jury made up of laymen found from all the testimony that the coronary occlusion was caused by mental strain, undoubtedly due to the fact that there was very little evidence of unusual physical exertion.

Upon appeal, a higher court held that mental strain is an injury within the meaning of the workmen's compensation law and therefore the decedent's death was compensable.

It takes very little imagination to appreciate the dilemma in which management finds itself when confronted with a prospective worker with heart disease. From the employer's point of view, disproving "mental strain" or "excitement" is almost impossible due to the subjective nature of these conditions. If a man says he was "excited," or under a "mental strain," how is one to prove that he was not? Obviously, in many cases the observations of surrounding laymen will corroborate the fact that the claimant was "excited" or under "mental strain" due to his work. When this corroboration is absent, we will get abundant testimony from friends, relatives, et cetera that he was a stoic who didn't show his emotions even when he was "boiling over inside." Juries will invariably resolve the doubts in favor of our stoic. Furthermore, attempts on behalf of the employer to prove that an "ordinary person" would not have been under a "mental strain" or "excited" by the alleged condition of employment would prove fruitless because the whole philosophy of workmen's compensation laws is that an employer takes an employe as he is and not as he would like him to be.

If this trend continues and as lawyers advise their employer clients of the state of the law in relation to cardiac cases, fewer and fewer will be employable. The fact is that labor, management, and the public have not given this problem the consideration that it deserves. Generally, the problem is this: The physically handicapped will become increasingly unemployable under present workmen's compensation concepts. The cost of maintaining this army of unemployables and their dependents will necessarily be borne by the society whose legislation and judicial decisions militate against their employability. These people are not only deprived of the opportunity to work, but the economy as a whole must bear the cost of their maintenance, and yet cannot reap the benefits of their contribution in the form of labor. The economy can ill afford this burden. The unemployables can ill afford the loss of self-respect, pride of achievement, and right to live as economically independent human beings.

Those who oppose remedial legislation do so on the grounds that the conditions which I have just forecast for you will not come about. Their assumption is invalid because they fail to understand that the economic impact of a workmen's compensation claim is reflected in the cost of production of the individual employer. He can lower his costs and improve his competitive position by keeping his workmen's compensation claims at a minimum

—one way of doing this could be by blacklisting cardiacs.

The physician and his legal colleagues, with the assistance of enlightened public, management, and labor, must work together to alleviate this condition if we are to have success in our important undertaking. The time for this action is now, when remedial measures can be most effective.

Although I will agree that the matter is becoming serious, the physician is pointing out to management that these bizarre situations such as I have just related to you are the more sensational, receiving much public notice, and are long remembered. However, for every compensation claim there are hundreds or thousands of faithful cardiac workers who go on year after year producing a good day's work, successfully modulated into the mosaic of our industrial population.

The industrial physician does not any longer refer to pre-employment examinations. Instead he speaks of pre-placement examinations, indicating the desire to look to the assets that man brings to his industry, rather than his deficiencies, and to practice as well as to preach selective job placement. In the Lamp Division of the General Electric Company, I am proud to say, we have eliminated all rigid requirements for physical fitness for employment—each man is appraised in light of the job to be done—no more lists of "causes for rejection" in our bulletin of instructions to our forty-four plans. Instead we speak of "provisions for acceptance." The industrial physician is seen frequently on the factory floors. He must know his jobs as well as his men to make this philosophy work.

Physicians are carrying on extensive case-finding programs either by complete physical examinations done on a regular periodic basis or by multiphasic screening techniques. They know that heart disease must be recognized if the worker is to be protected. It is the undetected case that becomes a compnsation problem.

The industrial physician does not undertake plant dispensary treatment of patients with heart disease—this is not his function. He recognizes and emphasizes the need for close co-operation between the employe and his personal physician. The family physician knows the patient. The industrial physician knows the job. The two meet on common ground.

Now I should like to turn to our experiences during the past few years in Cleveland to point out to you what physicians working together can do to assist the worker with heart disease.

In 1949 a Cardiac-in-Industry Committee was formed within the Cleveland Area Heart Society to concern itself with some aspect of heart disease and work. We soon learned that although we had in Cleveland eminent services for the vocational counseling, rehabilitation and industrial placement of the cardiac patient, these services were for the most part unpublicized and therefore unused by physicians. The number of cases processed by these institutions was estimated to represent only 4 per cent of the total case load. The poor showing is characteristic of rehabilitation, which in the end means job placement, on a national level. We had learned in visiting executives and industrial physicians that there was a local need for a center where persons with heart disease could be sent for diagnosis, analysis of physical capacities, analysis of the demands of the specific job in question, and finally a matching of the physical capacity and job demand through selective job placement. The Work Classification Unit at the Bellevue Hospital under the direction of Dr. Leonard J. Goldwater served as our model.

After considering for possible locations one of the large hospitals, a city health center, and the Cleveland Rehabilitation Center, the last was selected as being the most suitable. In this building there was a made-to-order sheltered workshop where the work capacity of the patient with heart disease could be progressively increased, under the supervision of their medical staff. Our selection has proved to be a wise one.

Dr. H. K. Hellerstein was engaged to carry out the physical examinations and to serve as director of the activity. From this point on I shall borrow heavily upon data which Dr. Hellerstein has kindly lent me for purposes of this presentation.

We operate one day a week and have now processed 325 new cases which, with their follow-up, have constituted a total of 1,400 clinic visits. All referrals must be from a physician in writing and no one is accepted without this letter. Patients are carefully screened, and only those with a specific work problem are accepted for examination. It is understood that no treatment will be prescribed.

At the Clinic, the patient is met by the medical social worker, who explores his background, giving particular attention to emotional factors which may be reflected in his reaction to his job. His work experience is studied by the vocational counselor.

Known or unexplored skills which might be of benefit to us in our final recommendation are carefully noted. At the completion of these interviews, the medical history is taken and a physical examination carried out. The routine laboratory work includes urinalysis, serologic test, blood count, cardiac fluoroscopy, an electrocardiographic study of the patient at rest and after exercise.

The medical aspects of the case are studied, and the patient classified according to the standards of the American Heart Association. The contemplated work is then reviewed not only from the point of view of its physical demands, but also out of consideration for the safety of the worker, his fellow employes, and the general public. The final recommendation of this integrated team of physician, social worker, and vocational counselor is then transmitted to the referring physician.

No charge for this service is made either to the patient or to the referring agency. Our operating funds are from those allocated by the Cleveland Heart Society for local use and raised by public subscription during the annual campaign.

The referrals to the Clinic have come from the following sources:

	Per cent
Private physician	61
Industrial Physician	21
Hospitals	11
Social agencies	7

The factors which determine an individual's employability are complex. They are more than the simple physical demands of the job itself. Of particular importance is the attitude of the individual toward his disease. Does he accept it philosophically and apply the remainder of his physical power to maintain himself in economic equilibrium by gainful employment, or is he in constant conflict with himself? In our experience, 43 per cent of the patients were unable to accept their illness and to live comfortably with it. This was particularly true of the young cardiacs—possibly because they had not had time to effect the more adequate adjustment seen in our older patients. Although we recommended formal psychotherapy in only 8 per cent of our patients, 80 per cent were in need of informal supportive reassurance by members of the Clinic staff.

This suggests that perhaps we in the profession are not giving as much attention as we should to proper formulation when counseling our patients with heart disease. Do not make careless statements, no statement, or over-emphasize unimportant laboratory details.

Disposition	*Per cent*
Interpretation reassurance	80
Reference to placement service	30
Job transfer within plant	22
Vocational counseling	13
Advise more medical treatment	10
Formal psychotherapy suggested	8
Referred to family agencies	4

We are often asked the question, particularly by our lay friends, "Just what is a cardiac job?" There is no such thing—it is any job a patient with heart disease can safely perform. Of the first 161 patients processed at the Clinic there were included eighty-five job titles covering a great range of physical requirements.

At the initial visit, 57 per cent of the patients were unemployed. This unemployment had been the result of cardiac disability in 41 per cent and noncardiac in 16 per cent. Their occupational backgrounds were good. Fifty per cent had worked for more than five years in the last place of employment and about half of these had worked more than ten years, and many as much as twenty years. There was a strong work motivation and desire for employment in 95 per cent of our cases. This strong work motivation was to a large measure responsible for the good results we obtained.

At all times we had tried to attract individuals who offered the best hope for successful rehabilitation, realizing that our time and budget were limited. Naturally, we were anxious to devote our energies where they would do the most good —that is, to start rehabilitation before occupational rigor mortis had set in. Only 4 per cent of the patients were medically indigent.

The value of this endeavor has been demonstrated by a changed attitude on the part of the patient, improvement in work performance, and placement in competitive industry. Of the first 161 patients, some of whom have now been followed for as long as three years, twice as many showed improvement in their cardiac status as showed regression, while 65 per cent were unchanged. An even greater number improved in their work capacity, thus indicating clearly that the integrated team approach can enhance work performance and employability, even when the cardiac capacity remains unchanged.

Sixty per cent of individuals, unemployed at the initial visit, were found to be gainfully employed at some time during the follow-up period. If we use this 60 per cent figure and apply it to our total case load to date, we can estimate a contribution in earnings to our community somewhere in the neighborhood of $400,000 (figured on an average annual wage of $4,000).

To indicate how an activity of this type can serve as a stimulus and supply material for collateral academic investigation, I should like to refer briefly to two research projects in progress at our University Hospitals and Medical School. Dr. Scott R. Inkley and Dr. Hellerstein are studying, intensively, some of our patients under controlled conditions of exercise on the treadmill. Respiratory and cardiac function studies are performed in an attempt to separate the disabilities induced by dysfunction of the two systems with the hope of finding a really reliable objective test to determine who is actually disabled and to what degree. This, of course, would be ideal. The physical requirements of all jobs could be known, say in the number of cubic centimeters of oxygen required per minute to perform it. Only those individuals with a predetermined physical ability to meet or exceed these job requirements would be considered eligible for the work under consideration. Unfortunately, as we have already pointed out, employability is determined by many things besides physical fitness, such as age, work aptitude, and previous experience. The job which these investigators have undertaken is a difficult one. The answer is not yet in sight.

We are fortunate at our Medical School in having Dr. C. Wesley Dupertuis, an expert in somatotyping and a long-time associate in the Constitutional Clinic at the Presbyterian Hospital. Dr. Dupertuis has "typed" many of our cases and although we are greatly impressed by the variations in temperament and body build among those with different etiologic types of heart disease, the work is not far enough along to give you any definite conclusions.

The physician is doing an education job with labor, public, management, and with the cardiac patient. He knows that heart disease is not necessarily progressively fatal, but rather that it is often associated with long remissions or periods of actual improvement. Of all the tests employed for the determination of cardiac capacity, none can be as reliable as actual observation of on-the-job performance in competitive employment. It is under these circumstances and here alone, that the cardiac worker performs under the full impact of the social, moral, and economic drives. In this real life laboratory the industrial physician has observed nearly always more work from the individual with heart disease than he had a right to expect from the clinical appraisal of the cardiac impairment.

Labor and management are sharing with the physician the pleasures that come from seeing a man with heart disease move from the position wanted column to the security that can come only from a job well done in competitive employment. Remember, it takes more courage to say a man with heart disease can work than to say he cannot!

CORTISONE AND MYOCARDIAL INFARCTS

(Continued from Page 1299)

Edward D. Spalding and the Department of Electrocardiography; and also Virginia J. DeBruin, R.N., for her invaluable technical assistance.

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Surgery of Mitral and Aortic Stenosis

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THE PROBLEM of mitral stenosis was extensively studied from the surgical viewpoint more than a quarter of a century ago.[2] No real progress was made, however, until the concept of opening the fused commissures rather than cutting away a portion of the valve was introduced by Bailey[1] and Harken,[3] thereby avoiding serious regurgitation. More recently the same concept has been applied to the aortic valve with some success. The two problems will be discussed separately.

Mitral Stenosis

The Selection of Patients.—The decision to operate upon a relatively young patient with "pure" mitral stenosis and severe symptoms may be an easy one to make. The difficulty increases when one is forced to evaluate the effects of other complicating factors. Some of these will be discussed.

1. Age, in itself, is no contraindication to operation. However, the risk of operation, as well as of the disease, is greater in older patients.

2. The consensus is that patients with evidence of rheumatic activity should not be operated upon.

3. In general, if a patient cannot be gotten out of "right heart failure" on a medical regimen, he is a desperate risk for operation. Since operation offers the only hope for such patients, however, they are frequently willing to take the risk. Not infrequently they are greatly improved.

4. The presence of a loud apical systolic murmur raises the question of predominant mitral insufficiency, but does not guarantee its presence. We have found angiocardiography to be most helpful in assessing the relative severity of stenosis and insufficiency.[5] In "pure" mitral stenosis the left atrium remains densely opacified for a long time, while the left ventricle is poorly opacified and small. In severe mitral regurgitation the left atrium and ventricle are equally opacified and the left ventricle is enlarged. At times the picture may be between the two extremes and the decision may be difficult.

Many patients with considerable mitral regurgitation have been greatly improved by the relief of some coexisting stenosis.

5. Disease of other valves complicating mitral stenosis was formerly considered to be a contraindication to operation. Aortic stenosis can now be dealt with surgically at the same time. Severe aortic regurgitation is still a problem since its surgical correction is still on an experimental basis.

6. Pregnancy is not a contraindication to operation. However, unless failure appears to be a threat on a medical regimen, operation may be deferred until after delivery.

7. Patients with mitral stenosis and minimal or no symptoms require special consideration. Formerly, most cardiologists refused to refer such patients for operation. However, the operation has reached a stage in its development which permits offering it to patients with hope of considerable benefit and with relatively low risk. If a patient has signs that mitral stenosis is causing left atrial enlargement and pulmonary congestion, it is difficult to see the advantage of waiting until auricular fibrillation, embolization, cardiac enlargement and congestive failure develop.

Preoperative Preparation.—The preparation of the patient for operation consists of getting him as free as possible of excess fluid by medical means. The judicious use of digitalis and mercurial diuretics will usually be adequate. At times the use of resins has been helpful.

Anesthesia.—The most important objectives are to keep the patient in a light plane of anesthesia and to keep him well oxygenated. It takes considerable experience to learn how this may be done most effectively. The choice of anesthetic agents is probably not a matter of great importance.

Operative Technique.—The lateral approach through the fourth interspace is preferred since it gives the best exposure and places the surgeon in the best position to deal with catastrophic hemorrhage should it occur. A purse string suture is placed around the auricular appendages. The carotid arteries are temporarily occluded while the auricular appendage is opened and allowed to bleed in the hope that any clots present may escape.

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A clamp is then applied. The carotids probably should not be occluded for more than 30 seconds at a time. Traction sutures are placed on the edge of the auricular appendage before the finger is inserted. After determining the characteristics of the valve and estimating the degree of regurgitation, if any, finger fracture is attempted. If it cannot be accomplished, a knife must be used. We have had to use a knife in about two-thirds of our patients. We believe the surgeon should persist until the antero-lateral commissure has been opened entirely out to the myocardium. We have been more cautious with the postero-medial commissure. When it can be opened by finger fracture we do so, but if we are able to open the antero-lateral commissure widely, we hesitate to use a knife on the postero-medial commissure. It is our impression that we have gotten the most severe regurgitation when cutting this commissure. With improvement in the type of knife, this may be overcome.

Great care should be used in closing the auricular appendage. After the purse string suture is tied at the base, it may be reinforced with free ties, and sutures should be placed to prevent any possible slipping.

Intra-Auricular Blood Clots.—When a clot is present in the auricle and is not pushed out as the auricular appendage is opened, the surgeon may attempt to go around it by forcing his finger between it and the auricular wall or, in rare instances, it may be best to enter the auricle through a dilated pulmonary vein. Even with the greatest care, an embolus is a grave risk under such circumstances. The occlusion of the carotid arteries in the neck or thorax may minimize the chances of a cerebral embolus. We have had 5 cerebral emboli at the time of operation. In two instances, when the patient awoke with a right hemiplegia, the left carotid pulse was not palpable. When the carotid artery was opened there was no flow from the proximal end. After the embolus was dislodged, the patient awoke without the hemiplegia in both instances.

Small Auricular Appendage.—When the auricular appendage is small or almost completely obliterated, the possibility of sudden catastrophic hemorrhage from an auricular tear is terrifying. We attempt to make an incision in the auricle in such a way that the clamp will cover it as the finger is withdrawn. If the auricle is torn beyond where the clamp can be applied, the finger should be kept inside the auricle to prevent hemorrhage as the tear is closed by suture.

Postoperative Care.—Special attention should be given to the parenteral administration of fluids during the early postoperative period, as well as in the operating rooms. Over-transfusion is a hazard. We do not hesitate to replace the blood loss, however, if the blood pressure is not maintained postoperatively.

Mercurial diuretics have been useful during the postoperative period, especially when the patient was a poor risk or the valve was not satisfactorily opened. When the valve has been opened widely, the postoperative course is usually no great problem.

Oxygen therapy appears to be helpful for a day or so. It is, of course, important to keep the tracheobronchial tree clear. If too much difficulty is encountered with this, a tracheotomy is advisable. Tracheotomy should always be done in patients with hemiplegia.

The low salt syndrome may result from preoperative efforts to rid the body of excessive fluid. Apparently this becomes a problem, however, only in the very poor risk patients. When the sodium does become depleted by this mechanism, its return toward normal by additional therapy is apt to add water to the body as well. If the heart failure is sufficiently bad it may be impossible to maintain chemical balance and at the same time keep the patient free of fluid. In the average patient this problem can be avoided by relaxing the diet once the mitral stenosis has been released.

Pericardial Effusion.—The pericardium is left open partly in an effort to avoid this complication. It will occasionally occur in spite of this. It should be suspected when the patient is not doing as well as anticipated.

Thrombosis and Embolism.—Postoperative pulmonary emboli have been fairly common in this series but appeared to be the major cause of death in only one instance. In addition to the five major cerebral emboli at or immediately after operation, there were two postoperative cerebral emboli, both fatal, and one popliteal embolus, successfully removed. Two instances of fatal embolism occurred after discharge from the hospital.

In our effort to minimize postoperative emboli,

we now use heparin, starting about forty-eight to seventy-two hours postoperatively, in most of our patients. If a clot was obviously left behind in the auricle, anticoagulant therapy is continued for several months.

Results.—We have analyzed 100 consecutive patients in whom there has been sufficient time to evaluate the operation; however, the analyses was made after the initial twenty-five operations when the results were not quite so good. In these 100 patients, there were six hospital deaths. One of these had a calcified auricular wall and we did not get into it. One had a catastrophic hemorrhage from a tear in the greatly distended pulmonary artery. One died of an acute coronary occlusion. Two died from cerebral emboli. The sixth, who also had severe hypertension, apparently died in heart failure. There were three delayed deaths. One was sudden and unexpected. The other two were due to lack of improvement by the operation.

Of the ninety-one patients who remain alive, forty-three have had excellent results, forty-two have had moderately good results and six have been improved little, if any.

Aortic Stenosis

Aortic stenosis cannot be dealt with in quite the same manner as mitral stenosis. Efforts at finger fracture have proved to be catastrophic. As far as we know, the Bailey Aortic Dilator[4] is the best instrument at present available for opening the aortic valve. It threads a beaded wire through the stenotic valve and then the instrument can be forced over the wire through the valve. The head may then be opened to enlarge the valve opening. We have broken the head twice on calcified valves but the head has been strengthened since that time.

Selection of Patients.—The patient with an isolated aortic stenosis does not go into right-sided heart failure until fairly late in the course of his disease. It is felt therefore, that when such a patient becomes incapacitated to a considerable degree by dyspnea on slight exertion, that he should be operated upon.

When aortic stenosis coexists with mitral stenosis it should be corrected at the same time. The aorta should be palpated at each operation for mitral stenosis. If the thrill of a jet of blood coming through a stenotic valve is palpable, the valve should certainly be dilated. When there is only a slight thrill, indicating some minimal disease of the aortic valve, it may be difficult to know whether to dilate it or not. One of our patients with mitral stenosis who died of an acute coronary occlusion had a slight aortic thrill at operation but was not dilated. At autopsy he had a slight stenosis but hardly one of significance.

The patient who has aortic stenosis and regurgitation is a problem. When the stenosis is the predominant lesion he should have his valve dilated. When the regurgitation is the predominant lesion something more than aortic dilatation is obviously required.

Operative Technique.—A left fifth interspace incision is used with the patient in the lateral position. The anterior approach may be used if it is evident that there is no mitral stenosis. When there is both aortic and mitral stenosis, the mitral commissurotomy is performed first.

A site is selected to enter the left ventricle. It should be relatively free of vessels, about half way between the apex and base of the ventricle and fairly close to the septum. A triangular suture is placed around this site and attached to a Rumel tourniquet. There should be a centimeter or more between the points of entrance and exit of the suture to allow a broad area of epicardium to be involved, since it is stronger than the myocardium itself. A small hole is made in the ventricular wall with a knife and the wire passed in and through the valve. The incision in the ventricle is then enlarged and the instrument inserted. With the head in place as palpated through the aorta, it is opened.

Hemorrhage from the ventricle may be reduced by tightening the triangular suture in the ventricular wall. Great care must be taken not to tear it out by tightening it too much. As one finger is held over the wound in the ventricle, sutures are placed and tied. Considerable difficulty has been experienced at times in controlling the bleeding. In some instances, the sutures have been tied over gelfoam or oxycel gauze because the bleeding could not be controlled otherwise. This is particularly troublesome when cardiac massage becomes necessary, as the sutures are apt to be loosened by the massage.

Ventricular fibrillation is the greatest fear and, even when it does not occur, the heart may slow down to such a weak beat that assistance from the surgeon is necessary. Unusual effort is required to successfully compress these hearts because of their large size and thick myocardium. It is, therefore,

difficult to get the myocardium adequately oxygenated. Because of the large size of the hearts, ordinary currents are not apt to be successful in defibrillation of the ventricles. We have used from 160 to 220 volts successfully.

These problems are most troublesome in patients with pure aortic stenosis since patients with coexisting mitral stenosis do not have such large ventricles.

Results.—Seventeen patients have been operated upon. Ten of these had coexisting mitral disease. The ventricles have gone into fibrillation in four patients. One of these could not be defibrillated.

Four of the patients died. One by ventricular fibrillation at the time of operation, two by cerebral emboli and one suddenly on the second postoperative day—unexplained at autopsy. All three patients who died postoperatively had terrifically calcified valves. The calcium had apparently broken free to go to the brain in two of these. At autopsy in both instances there were still calcium masses swinging freely from the valve, ready to give way at any time. Of the thirteen patients who survived, one has been helped little, if any, because of regurgitation. The others have been improved or greatly improved. Three of the patients with angina like pain have been most grateful for its relief.

Examination of the aortic valves at autopsy in the four patients who died showed two commissures opened nicely in the patient who died of ventricular fibrillation. The other three valves were so calcified that the commissures could not be identified. The valves were "broken" open more as bicuspid than tricuspid valves.

Summary

1. The problems of the selection of patients for surgery upon the mitral and aortic valves have been discussed.

2. Angiocardiography has proved to be a useful technique in selecting patients with mitral stenosis.

3. We have used a knife in approximately a third of the mitral valves operated upon in this series.

4. Of the last 100 patients with mitral stenosis operated upon in this series, there were six operative deaths and three delayed deaths. Of the remainder, forty-three have excellent improvement, forty-two have moderate improvement, six have been improved little, if any.

5. Sixteen patients have been operated upon for aortic stenosis with four deaths.

6. Eleven of the remaining twelve patients have been improved.

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HOW TO DEFINE SYSTEMS OF GOVERNMENT

During the recent A.M.A. Public Relations Institute held at Chicago's Drake Hotel, a number of speakers touched on everything from vitriolic excoriations in politics to the changing connotation of words. One speaker —and I can't remember who—burst forth with a delightful definition of the systems of government. It went something like this:

Idealism. If you have two cows, you milk them both, use all the milk you need, and have enough left for your neighbors.

Socialism. If you have two cows, you keep one and give the other to the man next door.

Communism. If you have two cows, you give both to the government; then the government gives you back a little milk.

Imperialism. If you have two cows, you steal somebody's bull.

Capitalism. If you have two cows, you sell one and buy a bull.

New Dealism. If you have two cows, the government shoots one; you milk the other, then dump half the milk down the sink.

Nazism. If you have two cows, the government shoots you and takes the cows.

Realism. If you have two cows, they're both dry.

—AMA Secretary's Letter

Effect of Hexamethonium on Normotensive Heart Failure

A Possible Correlation Between the Mechanism of Essential Hypertension and Normotensive Heart Failure

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THIS preliminary clinical report on the effect of hexamethonium in heart failure is presented for two purposes. We should like to encourage a well-equipped clinical center to follow our small clinical trial, with more adequately controlled studies on a larger group of patients. We should also like to present a slightly different concept of the inter-relation of the body's function in congestive heart failure and in essential hypertension. We feel there may be a possible intimate and significant relationship between "essential hypertension disease" and congestive heart failure. Our observations with hexamethonium is intended as a preliminary step to explore this relationship.

There is evidence that peripheral control of blood flow may be a primary function of tissue and not necessarily under the control of central centers. Essex and Associates[2] sectioned the splanchnic nerves in one leg of a dog and noted that the blood flow doubled for at least eleven months. Nine years later the flow in the femoral arteries of this dog was approximately the same. On sacrificing the animal, small vessels of the sectioned leg showed the medial musculature to be hypertrophied. Also it was noted before sacrifice that the vessels were especially susceptible to constrictor reaction initiated by adrenaline.

Pickering,[5] in discussing hypertension and blood flow, indicates through his observations that cardiac output is only slightly increased or normal in hypertension. He cites normal brachial blood flow in cases of coarctation of the aorta to indicate that peripheral adjustment of the diameter of vessels controls the blood flow to a normal rate but in so doing raises the blood pressure. His argument supports the concept that hypertension is the result of some unknown process controlling blood flow rather than a hormonal or centrally initiated disease.

Prinzmetal[6] points out that the viscosity of the blood and the cardiac output is the same in normotensive and hypertensive patients. This indicates peripheral resistance as a cause of elevated arterial pressure. He shows that blood vessels are capable of dilating fifteen to twenty times and suggests that the increase in resistance is not due to a fixed organic change in the walls. He suggests that an increased hypertonus is present in hypertension due to peripheral local causes and not due to disease of vasomotor nervous control *per se*. He also cites the brachial hypertension of aortic coarctation as secondary to the small size of the arm vessels which by controlling peripheral flow to norrmal raises the pressure because the arm receives more than its share of cardiac output. Prinzmetal[6] and Pickering[5] from their experimental work thus imply a possible peripheral control of vasoconstriction at a local level to control blood flow or perhaps to control the pressure gradient to local tissue.

From these observations of Essex,[2] Pickering,[5] and Prinzmetal,[6] it seems reasonable to assume that by means of changing their sensitivity to circulating hormone (adrenaline, renin, et cetera,) or by becoming more sensitive to sympathetic stimulus, peripheral vessels control the resistance to cardiac output. How or why the vessels respond to local tissue need by demanding vasospastic stimuli is unknown but the fact that this may be the case seems reasonable.

Almost any writer on the subject of essential hypertension returns to renal disturbance as a maintaining factor in hypertensive disease. Recently, Schroeder[8] in an excellent review of the problem writes a fairly representative opinion of the mechanism. He cites initiating factors in hypertension first; namely, psychogenic, hereditary, and neurogenic. The admission that these components can cause a transient elevation in pressure by vasoconstriction that is reversible seems evident at this time. Discussing the sustaining factors, however, raises a more difficult problem. The crux of the situation, as presented in this paper, seems to be embodied in the following statements:

"Neurogenic vasoconstriction and its effects can be profound and prolonged. When sympathetic discharges take place or when the sympathetic nervous system is hyperactive for prolonged periods, the cardiovascular and other systems are affected. Of most concern to the problem of hypertension are the effects on (1) blood vessels (2)

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kidneys and (3) endocrine organs. * * * * * While blood pressure in susceptible individuals may rise acutely as a result of generalized vasoconstriction, the other functions which control blood pressure more slowly, probably account for most of the prolonged changes which occur. The kidneys particularly are implicated. Renal ischemia on a neurogenic basis may cause the kidneys to excrete into the circulating blood humeral pressor substances which act for a long time upon blood vessels increasing peripheral resistance and raising blood pressure."

Schroeder[8] goes on to elaborate on sustaining factors but is forced to return constantly to secretions of endocrine glands and tissues in general, especially the renal tissues, to explain maintained hypertension. Indications are that metabolizing body cells seem to have the ability to command a higher arteriolar tension. Perhaps secretions of hormonal glands and renal tissue are only a more obvious stimulator of vascular spasm. It is possible that all tissue has the ability to elaborate substances to control blood pressure, but our ability to detect this effect is limited to the more obvious reactions of glands and kidney. More likely these organs are important auxiliary methods of maintaining general tissue arteriolar pressure.

Starr,[9] in 1949, brought us up to date on our understanding of the many and varied factors that possibly play a part in precipitating and maintaining congestive failure. In the following table he tentatively summarizes factors, suggesting the train of events leading to congestive failure:

1. Heart disease.
2. Diminished circulation to (a) kidney (b) bone marrow (c) other.
3. Retention of water and salt.
4. Increased blood volume.
5. Venous congestion.
6. Stimulation of heart from increased filling pressure.
7. Further damage to heart.

Starr[9] discusses peripheral resistance as a factor in cardiac failure only as a possible source of dumping blood from the arterial side to the venous circulation, granting that arterial tone falls in failure. He rejects this mechanism because, as he points out, peripheral pressure is the same or elevated in failure. The fact that peripheral resistance is maintained or elevated in failure, as it is in hypertension, focuses attention on an intriguing concept. We propose that disturbances in tissue metabolism including renal, endocrine, et cetera, gives rise to hypertension or cardiac failure depending on the status of the heart and possibly other, as yet unknown, factors. The train of events leading to hypertensive disease and cardiac failure is also quite parallel and reinforces this theory. This train of events in both instances stresses the effect of tissue metabolism, endocrine glands (adrenal); and pivots on the mechanism controlled by the kidney (salt retention, hypertensive hormones, et cetera).

It is not our purpose to give a critical review of the literature on this point nor to exhaustively review the articles by Schroeder[8] and Starr,[9] except to point out that they do represent the modern trend of physiological thinking on hypertension and cardiac failure, respectively.

There does seem to exist an underlying suggestion not perceived, that in both hypertensive arteriolar disease and in congestive failure, there may be a common denominator of peripheral nature. It is apparent that this peripheral control of vascular congestion and arteriolar constriction is intimately associated with renal function. The point remains that likely there are controlling factors on the tissue level that constrict arterioles and precipitate hypertension in a person of adequate myocardial reserve; or at other times may precipitate congestive failure in a person with poor myocardial reserve by raising peripheral resistance. This process seems to be suggested by yet another avenue of evidence.

Hints of bodily function and its inter-related aspects can often be obtained by consulting phylogeny. Approximately 500 million years ago, as the archaic fish of the Cambrian to Denovian period were developing in fresh water, primitive glomeruli began to appear first as filtering organs for excess body fluid. In the line of evolution that produced warm-blooded birds and mammals, the glomeruli persisted up to the time of reptilian development. In the late Permian period (two hundred million years ago), there was only one low blood pressure circulation through the gills or lungs, and by continuous flow, through tissue capillaries. This is the blood vascular system in amphibia and reptiles of today. Warm-blooded living on the other hand, with its superiority in competition for Lebensraum, is also of necessity accompanied by a second high pressure circulatory system.

Thus when mammals and birds first developed in the late Permian period, an increased and a different type of tissue metabolism demanded a higher peripheral pressure. In this manner and after this stimulation, the circulation through the lungs was separated from the peripheral; and the peripheral pressure rose from five to six times that of the pulmonary pressure. It seems self-evident that there

is an intimate phylogenetic relation between tissue-demand and pressure-increase. The kidney, from earliest times, has depended upon adequate arterial circulation and, in turn, is the organ developed primarily to control blood volume in the archaic fish. With the invention of warm-bloodedness, it is not surprising that this organ would play a major part in the control of blood volume and vascular pressure. The important fact remains, however, that increased metabolism, heat production and therefore tissue demand, go hand in hand with a high pressure arterial system. Is this not suggestive that hormone, bone marrow, kidneys, et cetera, are subservient to a general cellular demand and thus cause arteriolar constriction and increase blood volume and blood pressure to satisfy needs? It is fascinating to consider as further evidence that the pulmonary system in man does not usually share the hypertensive disease of the peripheral system. This again indicates that a new set of controls were developed for the second blood system as increased metabolism demanded.*

In the evidence of peripheral control pointed out by Essex,[2] Prinzmetal,[6] and Pickering,[5] there is a hint of some common mechanism of hemodynamic control. The representative reviews of Schroeder[8] and Starr[9] and the evidence of phylogeny gives us courage to construct a thesis stressing peripheral cellular control as initiating general vasal spasm and hypertension in a competent cardiac system *or* increased peripheral resistance that throws a marginally compensated heart into failure.

There could be a much longer discussion with considerable evidence in addition to that given and many just criticisms against such a concept. For instance, in beriberi heart disease, there is an increase in tissue demand and a rise in cardiac output with a peripheral dilatation. In hyperthyroid heart disease, there is likewise a peripheral relaxation and failure after a long period of high output. In both these conditions, there is a change in tissue demand without a rise in peripheral resistance. We must assume that in some conditions represented by increased peripheral resistance and hypertension or congestive failure that the mechanism for control is deranged. At least, that is our concept, and we have tried to find a clinical manner to test this thesis.

A fortuitous circumstance led us to become interested in the work of McMichael et al,[3,4] who investigated the effect of digitalis in the catheterized heart. At the same time, we noted the use of hexamethonium drugs in hypertension by Arnold and Goetz[1] along with other English authors. McMichael's[3,4] work indicates that digitalis introduced into the right auricle by catheter causes a drop in venous pressure and usually a rise in peripheral resistance and increased arterial pressure. This is accompanied by increased cardiac output in an erstwhile failing heart. There is also an increase in cardiac work. When aminophylline is administered intravenously to patients in hypertensive failure, the venous pressure falls while the cardiac output rises, and the increase in output is greater than that obtained with digitalis.

Since hexamethonium drugs have been used to reduce peripheral resistance and lower blood pressure, it seems reasonable to us that its use would relieve congestive failure, especially in a digitalized heart. We have chosen patients who are relatively normotensive, in congestive failure, who have been digitalized, and who have been taking mercuhydrin or other mercurial diuretics regularly. A brief history and description of results follow.

Method

Our procedure, in general, has been to treat semi-ambulatory patients at home or in the clinic. Initial doses of hexamethonium are diluted so that there are approximately 2.5 mg. of the salt in 1 cc. of water. An assistant registers the blood pressure every minute while the investigator injects the drug slowly in the opposite arm. A drop of 20 to 40 mm. of mercury systolic pressure is taken as a sign that there had been a vasodilating effect. In no instance have we encountered untoward incidents. The amount of drug, giving the response intravenously, has been chosen as the initial subcutaneous dose. This dose has frequently been increased. In most instances, the patient has taken his own medication at home every four to six hours while awake or a relative has helped him.

Case 1.—J. B., a sixty-four-year-old carpenter of Swedish descent, first came to the clinic in 1950 complaining of dyspnea and tightness in his chest. History revealed that he worked in a gold mine for seven years, twenty-five

*Those interested in pursuing this thesis on a phylogenetic level in greater detail are referred to the following very readible texts:

1. The Life of Vertebrates, by J. Z. Young, Oxford University Press, 1950.
2. Comparative Animal Physiology, C. Ladd Prosser, editor, W. B. Saunders Co., Philadelphia, 1950.
3. The Evolution of the Kidney, by Homer W. Smith, University Extension Division, University of Kansas, 1943.

years ago. His history was otherwise essentially non-relevant. On physical examination his blood pressure was found to be 170/80. There was a systolic and diastolic murmur heard loudest at the second interspace to the right. His electrocardiogram was normal except for the tendency toward right axis deviation. The roentgenogram of his chest revealed a moderately enlarged heart plus minimal pulmonary fibrosis.

Therapy had consisted of digitalis and frequent injections of mercuhydrin. During the preceding three months the patient needed mercuhydrin once a week intramuscularly in order to be comfortable. His chief source of discomfort at this time was dyspnea and he had to sleep sitting up in a chair rather than lying in bed. On January 4, 1951, a trial of hexamethonium* intravenously was made, and the patient's blood pressure fell from 160/80 to 125/60 in a space of two hours. During this time he was surprised that he was comfortable lying in bed and did not complain of dyspnea. His weight was 175 pounds. He was sent home with injections three times daily, of a hexamethonium and water mixture (one part of hexamethonium to two parts of water), to be taken at the rate of one-half cc. (4 mg.) three times a day. Digitalization was maintained. On January 12, 1952 the patient's weight was 175 pounds. He had been much improved and was able to sleep in bed for the first half of the night.

Subsequent events showed that while this patient was taking hexamethonium, he had a marked diminution in his dyspnea during the day, and also a marked diminution in his orthopnea during the night with increasing ability to sleep lying flat in bed.

It was necessary for the patient's relatives to give him the injections, and as this was an awkward procedure he lapsed into not taking them. On March 29, 1952, the man came to the clinic cyanotic and very dyspneic. He was given 6 mg. of hexamethonium intravenously, and within five minutes his dyspnea had completely disappeared, his color was pink and he walked out of the clinic promising to continue his injections at home. On April 11, 1952, the patient again came into the clinic very dyspneic and cyanotic. He was again given 6 mg. of hexamethonium intravenously, his color immediately became pink and he was able to walk out of the Clinic without difficulty. From this time to May 6, 1952, hexamethonium was discontinued because of the difficulty of taking it at home, and the patient obtained mercuhydrin injections once a week as well as maintaining his digitalis. On May 7, 1952, he gave himself two or three trial doses of hexamethonium with marked relief for a period of one to two hours. At this time, an oral preparation (methium chloride) became available and was administered cautiously four times a day before meals and at bedtime. The dosage was limited to 125 mg. and later raised to 250 mg. four times a day. Although oral medication seemed very effective, side effects and misunderstandings arose which made it hard for this man to govern his own dose. At the present time he is one of those patients who find that an oral diuretic "Neohydrin" is effective and he is compensated.

It was noted by repeated weighing of the patient while getting hexamethonium that no diuresis occurred. If 2 cc. of mercuhydrin were given intramuscularly he would note a large diuresis with a weight drop despite concomitant hexamethonium administration.

Case 2.—J. S., a sixty-eight-year-old man, who has suffered from aortic insufficiency for an unknown number of years, has been under our care for the past two years. In that time he has been hospitalized twice for acute heart failure marked by left ventricular failure and pulmonary edema. He was admitted to the hospital† on November 10, 1952, in acute failure and pulmonary edema with a blood pressure of 180/60 and a pulse count of forty per minute. His liver was enlarged approximately 3 cm. Marked venous congestion over the forehead, under the tongue and on the elevated hand was noted. Respirations were forty-two per minute; his blood pressure, when seen at the Clinic while compensated, usually was 140/60 to 160/60.

Ten mg. of hexamethonium was given slowly intravenously until the blood pressure dropped to 145/40. Some immediate relief was obtained, eight minutes later re-examination showed marked relief, but with râles still present in both bases. Twenty minutes after the administration of hexamethonium, his blood pressure was 120/40. He was very comfortable, lying flat in bed and dozing. Râles were still present at both bases. Thirty-five minutes after hexamethonium, his chest was completely cleared; his blood pressure was 142/54. Pulse was 100 per minute, and the respirations were thirty per minute. This patient was maintained successfully on hexamethonium intramuscularly for approximately thirty-six hours; he was comfortable and able to lie flat in bed during this time. His blood pressure varied but never dropped below 120/40 and did not rise above 145/60. Twelve hours after admission, he complained of an ache in his anterior chest which he had had before at home at frequent intervals. It is questionable whether this ache was due to angina. Hexamethonium was given carefully, and it was noted that this aching sensation disappeared within five minutes. Nausea and vomiting arose as a complication of hexamethonium treatment, and after forty-eight hours the patient was given mercuhydrin as a diuretic. Diuresis was profuse contrary to the observed urinary output during hexamethonium administration. Digitalis and mercuhydrin were continued. The patient recovered compensation and was discharged.

Case 3.—J. F., a sixty-four-year-old man, has been in marginal failure for two years with aortic insufficiency. His blood pressure has averaged 170/80 and his cardiac insufficiency has been manifested by orthopnea, cough, and a constant finding of râles in the right base. He had been digitalized for six months, had received ammonium chloride gr. 15, four times a day, and had been receiving adequate doses of mercuhydrin once or twice a week for diuresis. On February 27, 1952, hexamethonium was instituted at the rate of 6 mg. morning and evening. This therapy resulted in the patient's sleeping much better with a markedly diminished cough. This medication was continued until April 1, 1952 when, without the patient's knowledge, a placebo of normal saline was substituted; two days later the patient's family called in considerable excitement stating that the medicine was no longer affecting the patient and that he was becoming worse. Hexamethonium was surreptitiously reinstituted, and the patient immediately achieved his former level of comfort.

It is important to note that early in the course of the treatment of this patient, apparently an overdose of hexamethonium was administered. The patient complained of severe oppressive pain, and on arriving at the patient's home, his blood pressure was found to be 80/40. He was feeling better by that time, so it is assumed that his blood pressure had reached levels below this. Fortunately, no adverse effect was incurred, and although this accident was repeated several times, the patient gradually attained the proper dose, which has been maintained to the present time. It should be noted that mercuhydrin 2 cc. intramuscularly constantly gives a diuresis while this patient is taking hexamethonium. His weight is constant but drops 4 pounds following mercuhydrin and gradually reclaims the 4-pound loss in a week's time. Symptoms do not change with weight loss or weight gain, if hexamethonium is maintained.

Case 4.—Mrs. C. E., a seventy-two-year-old woman, had a coronary accident four years ago and had been in marginal compensation up to April 15, 1952. She had been given digitalis and mercuhydrin intramuscularly two or three times weekly. She has had occasional anginal pains in her chest and left arm markedly relieved by

*Bistrium supplied by Squibb Company.

†Grace Hospital—Detroit, Michigan.

nitroglycerin in the past four-year period. Physical examination revealed a well-nourished, well-developed woman with marked cardiomegaly. The blood pressure was in the neighborhood of 170/100 on repeated office visits. On the night of April 15, 1952, she suffered from an acute attack of othopnea which was accompanied by a constricting feeling in her chest and a pain in her left arm. Her heart sounds were distant, and the apex impulse could not be palpated through the chest wall. Her blood pressure was 170/100, pulse count 88, respirations 24 per minute. At 12:15 a.m., 4 mg. of hexamethonium was given and eight minutes later her chest pain and dyspnea had disappeared. Her facies, which had been drawn and tense, was now relaxed. Fifteen minutes after the injection of hexamethonium, her blood pressure was 90/60 and twenty-five minutes after the intravenous injection, her blood pressure was 110/68. Her apex heart beat was full and easily palpable at this time. She was requested to exercise by walking back and forth within her bedroom and she did so without any discomfort. The medication was not continued.

Case 5.—Mrs. E., an eighty-seven-year-old woman, had been seen two years previous to the present illness for arteriosclerotic heart disease manifested principally by minimal left heart failure and runs of ventricular extrasystoles. On April 18, 1952, she was in severe distress manifested by marked dyspnea. She was semi-comatose; respirations were forty per minute; the blood pressure 160/70, and the pulse count was seventy-two per minute. She had been adequately digitalized. Three mg. of hexamethonium were given I.V. One hour later her restlessness had disappeared and she was sleeping. There was no sign of orthopnea. Her respirations were twenty-four per minute and the blood pressure was 100/60. Basal râles were not present. This patient has been maintained since on digitalis; has not had a recurrence of her acute left ventricular failure, nor received additional hexamethonium.

Case 6.—Mrs. B., a sixty-five-year-old-woman, who had suffered a coronary accident one year previously, was administered hexamethonium on April 3 and 4, 1952, because digitalization and diuretics had not achieved maximum desirable effect. The patient at this time was complaining chiefly of orthopnea. There was no indication of right heart failure. Relief by intramuscular injection of 2 mg. of hexamethonium seemed to be quite marked. The effect of one injection lasted approximately four to six hours. The medication was given intermittently by a nurse at home to allay symptoms. Diuretics given concurrently always gave a prompt diuresis, despite the fact that orthopneic symptoms were controlled by the hexamethonium injections. This patient succumbed to a second coronary occlusion at a time when hexamethonium had not been given for at least two weeks preceding the attack.

Case 7.—B. B., an eighty-year-old man with arteriosclerotic heart disease, suffered from atypical pneumonia in February, 1952. Subsequently, he developed myocardial insufficiency manifested by dyspnea, basal pulmonary râles and dependent edema. He was digitalized and given mercuhydrin two to three times weekly (2 cc. intramuscularly). Maximum benefit apparently was reached and hexamethonium (methium chloride) was given by mouth. The dose of 62.5 mg. four times daily was instituted and gradually raised to 125 mg. four times daily. His blood pressure fell from 160/100 to 140/90. The medication apparently relieved his dyspnea and orthopnea making it possible for the patient to walk about the house without dyspnea. It was interesting to note that only questionable regression of the dependent edema occurred. This patient moved from Detroit, and contact has been lost.

Case 8.—Mrs. M. N., a thirty-four-year-old woman with rheumatic mitral stenosis in failure, was administered hexamethonium after digitalis and mercuhydrin had been instituted. It was noteworthy that although the dose of hexamethonium by intramuscular administration was forced to the limit of 8 mg. every four hours, the patient received no benefit that could be discerned by observation. There were no deleterious effects.

Case 9.—K. S., a nineteen-year-old boy with a normal blood pressure of 120/70, had been suffering from asthma for many years, and during an acute attack 3 mgs. of hexamethonium was administered intravenously. The asthma was relieved within ten minutes, and objective signs of wheezing in his lungs had disappeared in the same interval. The symptoms returned in thirty minutes.

This patient was added to our series because it seemed reasonable that hexamethonium might cause relief of dyspnea due to bronchial relaxation. It seems possible from this one experiment that this might be so.

Discussion of Cases

It was noted early in our experience that relatively normotensive patients in failure require a much smaller dose of hexamethonium to reduce their blood pressure than does the hypertensive person. Two to 4 mg. intravenously seems adequate in failure, whereas we have given as much as 25 to 35 mg. intravenously in some hypertensive patients. It has further been noted, but not otherwise recorded here, that in hypertensive heart disease with failure much higher doses are needed to give clinical results than are needed in normotensive patients in failure.

The fact that diuresis does not accompany the relief of symptoms on hexamethonium therapy seems very evident. On those patients kept on hexamethonium for a prolonged period and observed carefully (Cases 1, 2, 3, 4 and 6), it was evident by following their weight gain that fluid was being retained despite their relief. Repeatedly, a diuresis was obtained by mercuhydrin and a weight loss noted. It was interesting that despite this effect pulmonary edema as manifested by râles did not recur under hexamethonium therapy. Dyspnea and edema could be relieved despite the lack of diuresis by administering hexamethonium as occurred in Case 2.

The danger of giving hexamethonium to a patient with a history of coronary occlusion is evident. Theoretically, the filling pressure of the coronary ostia might be seriously lowered and an impending coronary occlusion precipitated. According to our concept, this would be more than overcome by relieving peripheral resistance. It was with considerable temerity that we administered this drug to Mrs. C. E. (Case 4). In this one instance, the result was very pleasing. Until more work has been published on the cardiovascular

dynamics of hexamethonium, the drug should be withheld in cases of anginal pain.

As will be noted, the patient in our first three cases suffered from left ventricular failure primarily due to aortic insufficiency. If hexamethonium does, indeed, relieve heart failure by lowering peripheral resistance, we would expect pure left failure to be most markedly relieved. In Cases 4, 5 and 6 consisting of arteriosclerotic heart disease, there was some right as well as left heart failure. We noted, as expressed in the case histories, that the left heart failure was most dramatically relieved, while the right failure occurring concomitantly was little affected as was evident clinically in Case 7.

Case 8 is the only situation of predominant right failure that we have put on hexamethonium therapy. It is noted that a dose twice as large as was usually effective did not show the least clinical relief.

In Case 9, we have our only attempt to investigate the bronchial dilating property of hexamethonium. One could expect an autonomic blocking agent, such as hexamethonium, to relieve bronchial spasm. In this one situation, we found this to be true. As is reported, the drug apparently gave immediate relief. Of course, in left failure by clinical observation alone, we cannot determine exactly the mode of action that brings relief, and it may well be that the bronchial effect is more important than the peripheral arteriolar effect.

Conclusion

We started this small clinical project with the intention of attempting to use hexamethonium, a well known vasodilator substance, as a tool to help unravel the problem of heart failure. If it does indeed relieve heart failure by releasing peripheral resistance it would be a step in the long path that might eventually prove that essential hypertension and left ventricular failure are merely two manifestations of one disorder: tissue demand → stimulation of endocrines especially adrenal → retention of salt and other renal phenomena → vasoconstriction → (1) hypertension with normal myocardial reserve or (2) failure in normotension with a myocardial reserve unable to meet the demand.

We feel that our small experience has shown that hexamethonium can relieve the symptoms of heart failure; but better controlled clinical studies must be done, and possibly catheterization observations performed to unravel the bronchial and peripheral effect. We trust that interested groups will be encouraged to follow this line of evidence. We note with interest that Sarnoff, Goodale and Sarnoff[7] described a clinical experience which agrees notably with our results using another experimental compound which is a marked vasodilator also.

We do feel justified in concluding that hexamethonium is as valuable as aminophylline in acute left heart failure, and it has the added advantage that it can be given subcutaneously by an untrained person. It should take its place temporarily, at least, in the armamentarium of the physician.

Summary

1. A concept is proposed relating essential hypertension and normotensive left ventricular failure to one etiological factor of general tissue demand.

2. This is in contrast to the usual mode of accepting these two conditions as separate entities, and is in contrast to the usual causes cited for hypertension as being due to a more central mechanism, e.g., renal, hormonal, et cetera.

3. Hexamethonium was given a clinical trial in congestive left heart failure in digitalized patients.

4. Hexamethonium in our experience was very successful in relieving the symptoms of congestive left heart failure.

5. A supposition is made that this relief is due to a release of peripheral resistance.

6. A plea is made that a well equipped center with proper facilities carry on this preliminary observation.

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4741 Spokane

Some Clues to an Integrative Study of Hypertension

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EVERY other individual in the United States over the age of fifty dies of cardiovascular disease. One half of these deaths or one quarter of all deaths within this age group are due to hypertension. It is the gravest health problem of middle adult life in our civilization.[13] Statistics compiled by insurance companies, government agencies and medical authorities reveal a progressively increasing incidence-rate of hypertension. Halliday has shown that there is not only an increased incidence-rate of the "psychosomatic affections" (hypertension is considered to be one of them) in the "traditional age group," but there is also a shift of the peak of maximum age incidence toward younger age groups. This author refers to studies which indicate that there are subgroups within our culture which are more affected by certain psychosomatic diseases than are others.[8] For example, in Southern American Negroes, hypertension is two and one-half times more common than in Southern whites, and the course of the disease in the former is also more severe. Among the African Negroes, however, especially those who have rarely come into contact with civilization, hypertension is a very rare condition. It is well known that the Chinese and members of other oriental cultures rarely suffer from this disease.[13] It appears then, that there exists some correlation between the prevalence of hypertension and the culture within which people live.

Within the past ten to fifteen years, there has developed in medicine a new philosophy which considers the individual to be not only a biological organism, but also a social being acting within and reacting to his society. This interaction makes inseparable the concept of the individual and the social matrix within which he lives. This holistic point of view has been summarized by different authors under a multiplicity of names, such as "psychosocial medicine," "psychosomatic medicine," et cetera. "The universe of social psychological medicine is not *primarily* interested in the causation of disease, but with the conception and formulation of laws which govern a patient's relationship to his environment, the description of intrapsychic mechanisms regulating this relationship, and in the psychological and social factors involved in the problem of health.[8] It is with this concept in mind, that an attempt will be made to integrate some of the historical, physiological, psychological and social aspects of hypertension.

A brief review of the history of physiology reveals that the major discoveries in hemodynamics have been made in approximately 100 year cycles. In 1633, William Harvey reported on the nature of the circulation. In 1733, Stephen Hales in England described a method of measuring the blood pressure of a horse. In 1833, Richard Bright correlated the enlargement of the heart with increased peripheral resistance within the chronic granulomatous kidney and in 1933, Harry Goldblatt produced essential hypertension in animals by means of three silver clamps on the renal arteries, impeding the circulation of the blood within them. One of the assumptions of Goldblatt was that a pressor substance is produced in the ischemic kidney. This substance, renin, reacts with hypertensinogen (a_2 globulin (Selye)) to produce hypertension, and this in turn acts on the peripheral vascular bed to produce a vasoconstriction and a rise in blood pressure.[6] The excellent experimental work of Trueta in 1947 has essentially corroborated Goldblatt's findings.

Trueta and his co-workers attempted to determine experimentally whether changes found in the kindney of patients who died of renal failure following crushing injuries of the limbs were due to vascular disturbances caused by reflexes initiated in the injured extremities. Their first experiments with animals consisted of:

1. Constriction of one hind limb. There was observed a constriction of the arteries supplying both hind limbs, and the arteries supplying the kidneys.

2. Stimulation of the central end of the divided sciatic nerve or the distal end of the divided splanchnic nerve. This produced the same results, pointing to the existence of a nervous reflex mechanism affecting the kidneys.

3. Dividing the splanchnic nerve before the application of the tourniquet to the limb. This

resulted in no changes in the renal arteries, corroborating the aforementioned assumption.

The following conclusions were drawn:

1. Constriction of the hind limb resulted in a decrease in volume of the blood reaching the kidney.

2. Decrease was the result of a neurovascular reflex mechanism.

Trueta's major work, however, grew out of an incidental finding. During the experiments, it was observed that there was a redistribution of the blood flow within the kidney itself. "Study showed that circulation through the cortex could be diminished or even totally arrested while the circulation continued through the medulla." This diversion of blood flow was shown by means of angiography and direct observation of the cortex in which marked pallor and flushing was seen alternatingly. Sometimes there apparently was a complete cessation of renal cortical circulation; yet, the blood continued to flow through the renal vein. Within the renal vein bright red arterial blood was frequently found and the renal vein sometimes pulsated. Dyes were injected into the artery of an ischemic kidney and subsequent examination revealed escape of the dye through the renal vein, retention of the dye within the medulla, and no staining of the kidney cortex. The cortical circulation of the kidney showed a marked lability. The surface of an exposed kidney responded with blanching to appropriate stimuli but there was also observed a wave-like blanching and flushing even in the absence of stimuli. The renal circulation showed a sensitivity to vascular changes anywhere in the body. The cortical vessels were always involved whenever any area of the body underwent vascular changes even if no other organ gave evidence of such a change. The response of the kidney cortex to the same stimuli differed from animal to animal quantitatively.

The distribution of intrarenal blood flow between the cortex and medulla reflects the operation of a normal vascular mechanism for maintaining the fluid balance of the body. The regulation of this distribution is effected either by direct nervous control or through the intermediation of liberated hormones or, more probably, through the action of both. It has been shown that an animal with a denervated kidney can produce normal urine, but only in a protected environment. The denervation has reduced the animal's adaptability to stress. The animal has lost the power to divert the flow from the renal cortex to the medulla.

The experiments of Goldblatt and others explain the development of hypertension in cases of obstruction of the renal artery (as that due to an arteriosclerotin plaque or pressure on the vessel) but how does one explain the development of essential hypertension without organic changes in the renal artery or in the kidney itself? Is the kidney always involved? If it is, do the same mechanisms obtain as in Goldblatt's experiments? Renin is produced in an ischemic cortex. May not excessive diversion of cortical flow into the medulla with resultant ischemica of the cortex be an initiating factor in the production of pressor substance and thus in the development of essential hypertension?

The sensitivity to specific stimuli varies between individuals. Excessive stimulation of one type, in an individual unduly sensitive to that stimulus, might result in excessive operation of this normal intrarenal mechanism. Overactivity of such a mechanism over a period of years might result in essential hypertension without anatomical evidence of a renal disorder until late in the disease.[12]

Selye describes as the "General Adaptation Syndrome," the condition which is obtained when an animal is subjected to a non-specific stress. If this stress is maintained for a prolonged period, ACTH is produced in the anterior pituitary and this substance in turn stimulates the production of glucocorticoids and mineralo-corticoids in the adrenal cortex. The latter two substances increase the resistance of the organism to stress, i.e., "it facilitates adaptation to stress as in infections, intoxications, 'nervous commotions,' cold, et cetera, but the resulting endogenous hormone overdosage may become the cause of certain cardiovascular, renal and joint diseases."[10] The *gluco-corticoids* effect gluconeogenesis. They facilitate conversion of nonsugars (proteins) into carbohydrates and it is during this metabolic process that A_2 globulin or hypertensinogen is produced in the liver. The *mineralo-corticoids* facilitate the elimination of potassium through the kidneys and cause at the same time the retention of sodium chloride and water in the tissues. The effect of mineralo-corticoids upon the kidney is probably dependent upon their action on this electrolyte metabolism (sodium retention).[9] The nephrosclerotic kidney presumably produces an increased amount of renin due to obstruction of blood flow through the glomerular tufts. The

renin in turn acts on the hypertensinogen of the liver to produce hypertensin, a pressor substance.[11] Chronic overdoses of mineralo-corticoids produce marked glomerular lesions as well as cardiac hypertrophy, a pronounced and prolonged rise in blood pressure, myo-cardial nodules (similar to Aschoff nodules) and periarteritis nodosa especially in the mesenteric, coronary and cerebral arteries of experimental animals.

Trueta and his co-workers were aware of the limitations of an unidisciplinary approach to the problem of essential hypertension. They state, in the final paragraph of their book, "We believe that the primary etiological factors of hypertensive disease will eventually be found in the central nervous system, even in the human mind itself, and that with their discovery will come a complete understanding of the condition known as essential hypertension, affording new hope for the victims of this disease of civilized man."[12]

Although Selye hypothecates connections between the hypophysis, hypothalmus and cortex, his actual work does not concern itself with mechanisms operating above the hypophysis. Let us now see whether the neurophysiologist can provide us other clues of these connections. W. R. Hess has shown that hypertension can be produced by the stimulation of very circumscribed areas in the diencephalon, and he and other investigators (Fulton, Livingston, et cetera) have produced an increase of blood pressure by stimulating several cortical areas. MacLean, referring to Fulton and Livingston, recently mentioned that stimulation of the orbitomesial surface of the brain, as well as stimulation of the posterior hypothalmus and of other points along the sympathetic chain to the kidney, produces blanching of the renal cortex. He hypothecates that "if emotion found chronic expression over these pathways, it is conceivable that the renin enzyme system could be so activated as to lead to persistent hypertension. "The question arises in reference to psychosomatic disease, whether or not patterns of emotional behavior leading to excessive visceral expression are repeated so often in childhood as to become permanently ingrained in the visceral brain with the result that they are perpetuated in later life. . . . In hypertension the conscious need for restraint would exert through the neocortex an inhibition of the somatic expression of rage for which the autonomic responses are brought into play and so interfere with the physiological safety valve of muscular activity." MacLean also makes the striking observation of patients with psychosomatic illness; i.e., they are apparently unable to verbalize their emotional feelings. "There is very little direct exchange between the *visceral brain* and the *word brain* and the emotional feelings built up in the hippocampal formation, instead of being relayed to the intellect for evaluation, found immediate expression through autonomic centers. In other words, emotional feelings, instead of finding expression and discharge in the symbolic use of words or in appropriate behavior, might be conceived of being translated into a kind of 'organ language.' The psychosomatic patient is illiterate about his emotional feelings."[7]

The Pavlovian school of Conditioned Reflexes considers the central nervous system, and especially the cortex, to be the integrative apparatus of the entire organism. Pavlov's pupils now demonstrate experimentally the direct influence of the cortex upon the function of the internal organs and thus establish a bridge between the motor-sensory and vegetative systems. The cortex is the seat of the conditioned reflex. Once established, the conditioned reflex is difficult to break. The conditioned reflex has been shown to develop even with the use of such drugs as morphine, nitroglycerin, adrenaline and acetylcoline. For instance, in an animal whose spleen had been conditioned to express blood in response to an injection of adrenaline; water, when substituted for adrenaline, produced the same results. The spleen was denervated and when water was given as though it were adrenaline, the spleen still expressed blood. They assumed that the endocrine route serves as a means of transmission of messages from the brain.

A similar experiment was performed with the kidney. A conditioned reflex was established which resulted in a blanching of the kidney surface and an alternation in diuresis. Neither denervation of the kidney nor severance of the hypophysis from the brain (by the method of Speransky) altered this conditioned reflex. However, when both connections were disrupted, the conditioned reflex could no longer be evoked.

The Soviet workers state that all disease processes involve the entire organism and especially the central cortex, the highest integrating organ. Stimulations of the cortex can alter the direction of the action of the organs, either toward health, or toward disease.[6]

Let us now turn from the conditioned reflex theories and the dynamic formulations based on

neurophysiological principles as stated by MacLean, to the formulation of the psychodynamic structure of the hypertensive individual. Alexander states that the hypertensive person has "a very profound conflict between aggressive, dependent, feminine receptive tendencies and overcompensatory competitive, aggressive, hostile impulses which lead to fear and increase of flight from competition towards the passive dependent attitude. The aggressive impulses are inhibited but not deeply repressed. This cycle in itself is extremely common, being the central emotional conflict of a large number of neurotic individuals who have high blood pressure. Characteristic of the hypertensive patient is, however, his inability to relieve freely either one of the opposing tendencies." A kind of emotional paralysis can be observed which results in the two opposing emotional attitudes blocking each other.[1]

Binger et al., in the monograph "Personality in Hypertension," came to similar conclusions; viz., "There were exaggerated strivings, submissiveness coupled with stubbornness, feelings of weakness and defenselessness, suppression of hostility, fear of injury and emotional detachment. In addition, there was a tendency to develop acute emotional disorders characterized mainly by anxiety and depression and often associated with temporary failure of the usual techniques of mastery of the environment. This acute failure of the integrated functions of personality seem to result from the inefficiency of the patterns of defense against anxiety and the weakness of the repressive mechanisms. There was usually restricted social life, inhibited sexual development with actual or relative impotence, a tendency to failure of heterosexual adjustment, an unconscious homoerotic orientation and a tendency to incur frustration and suffering in interpersonal relationships exemplified most prominently in the marital relationship and in the relationship with employers. This characteristic pattern made its appearance early in life and persisted relatively unchanged through adolescence into adulthood. The defenses and compensations which were erected in an effort to counteract the anxiety, proved to be consistently inadequate, and therefore frequently exposed patients to a sense of imminent danger and insecurity."[2]

On the basis of the observation of hypertensive individuals and with the use of a specific method of investigation which she developed, Flanders Dunbar has described the personality of the "typical" hypertensive as follows: "He appears anxious and tense and has perfectionistic tendencies combined with obsessive doubts. In situations of particular stress he has the tendency to take recourse to 'wine, women and song.' He is ambitious, but constantly fearful of not making the grade. He is shy and conventional, except when caught off guard," and "he feels best when he finds social approval," et cetera.[4] Each formulation deals with the feelings of the personality in relation to other people and to society.

Let us now move from the consideration of individual intrapsychic conflicts to the study of interpersonal relationships. Jules Henry, in his paper, "Anthropology and Psychosomatics," defines culture as the product of "acquired response systems attained through domestication." In this context he states that "the more numerous and more varied, and the more conflicting the responses the organism is forced to acquire, the more the organism is subject to psychic malfunction."[5] It appears that any individual is born into a field of tension but the individual who becomes an essential hypertensive as he grows older, intensifies cxternally the field of tension by increasing his difficulties in interpersonal relationships and internally by essential hypertension.

On the basis of *one* disease entity, we have presented the problem of the intricate and complex connections between man and his environment. We have returned to our starting point, for we have not been "primarily interested in the causation of disease, but in the conception and formulation of laws, which govern a patient's relationship to his environment, the descriptions of intrapsychic mechanisms regulating this relationship and the psychological, social (and here we can interpolate, the physiological), factors involved in the problem of health."

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Dicumarol Therapy in the Treatment of Status Angina and Impending Coronary Thrombosis

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CORONARY thrombosis with myocardial infarction is one of the most serious problems confronting the medical profession today. Until recently, our therapy has emphasized rest and sedation, which had the undesired effect of enhancing thrombosis. During the past decade, anticoagulant therapy has been of great value in the treatment of vascular diseases associated with intravascular thrombosis.

While myocardial infarction often comes on without warning, it is sometimes heralded by a prodromal syndrome in which anginal attacks alter their pattern and become worse. About half the patients[1] with coronary thrombosis pass through a premonitory stage lasting hours, days or weeks before the final complete closure. During this phase the patient who has previously experienced angina pectoris finds that his pain occurs more frequently, that it is likely to be more severe than usual, that it occurs with a less conspicuous precipitating factor, sometimes occurring without effort at all or even during sleep. The pain lasts longer and is not relieved as readily by nitroglycerin. Patients who develop coronary thrombosis without previously having had angina pectoris often go through a similar period of a few hours, days, or weeks prior to their major attack.

The ultimate control of coronary artery disease will rest primarily on the prevention of atherosclerosis. However, until that time, other measures must be employed in reducing the mortality, morbidity, and recurrences of coronary thrombosis.

Ambulatory treatment with dicumarol has been employed by many observers and reported in the treatment of patients with chronic recurrent thrombophlebitis, multiple sclerosis, rheumatic heart disease with auricular fibrillation and repeated embolism, and various eye conditions.

The continuous use of dicumarol over a period of years to possibly prevent recurrent coronary occlusion has been shown feasible and relatively safe by Nichol[2] and his group. Nichol suggested a long-range cooperative study to properly evaluate long term dicumarol therapy in the prevention of recurrent coronary artery occlusion and in the treatment of status angina.

Our interest in employing dicumarol in the treatment of status angina refractory to accepted therapy and in the prevention of coronary artery thrombosis was stimulated by Nichol's publication and experience with our first patient treated with long range dicumarol therapy.

Case 1.—A thirty-nine-year-old white man was seen in December, 1950, with severe status angina. Electrocardiogram, orthodiagram, complete physical examination and laboratory studies were all negative. Without our knowledge, he immediately went to his dentist and had two extractions. Within six hours, he sustained an acute coronary thrombosis. He was confined to the hospital and maintained on adequate dicumarol therapy for thirty days. Two weeks after the dicumarol was discontinued, he was seen with angina on the slightest exertion associated with occasional bouts of status angina. He was immediately begun on preventive dicumarol therapy. When his prothrombin level was below 30 per cent (Quick one stage method) he experienced no angina.

He then had a massive renal hemorrhage with a prothrombin level of 20 per cent. The dicumarol was discontinued and appropriate therapy for the hemorrhage instituted. Within two weeks his angina had recurred with greater intensity. Dicumarol was again started, the pain was relieved and the patient returned to a sedentary occupation. After three weeks of dicumarol therapy with prothrombin levels ranging from 20 to 35 per cent, he had another massive renal hemorrhage. At this time, on March 28, 1951, it was concluded he could not tolerate anticoagulant therapy. On April 5, an examination in the office revealed no change except moderate increase in the anginal pain. On April 10, he had a typical attack of coronary thrombosis and expired within twelve hours. Autopsy revealed an old posterior myocardial infarct and a fresh anterior myocardial infarct with extensive sclerosis of all coronary vessels.

We have had the opportunity to treat thirty patients with preventive dicumarol therapy within the last two years with follow-ups from six months to two years. Usually the patients were hospitalized for approximately two or three weeks, during which time a dicumarol dosage schedule was ascertained. The dosage varied from 50 mgm. four days weekly to 150 mgm. daily, seven days weekly. The average dose varied from 200 to 600 mgm. weekly. The patient was sent home to follow his dosage, and the prothrombin concentra-

tion was determined weekly. After two or three weekly determinations, the interval was extended to two weeks and finally to three weeks. In some patients dicumarol was started in the office. In order to avoid misunderstanding the dosage was written on a prescription pad and altered as necesary by telephone conversation. All patients were warned regarding the signs of excessive dosage and were told to report immediately should hematuria, melena, ecchymosis, or abnormal bleeding tendencies appear. The prothrombin levels were determined in the same laboratory on the ambulatory patients. Patients were warned about the potentiating effect of salicylate compounds and naturally no one who had the known contraindications to anticoagulant therapy was permitted to go on ambulatory dicumarol.

Typical cases treated with preventive dicumarol therapy were:

Case 2.—G. F., a man, aged sixty-six, had a typical coronary thrombosis on July 6, 1950, which was associated with acute syncope and was treated by hospitalization in the routine manner. Following this attack, he had angina of effort which became angina decubitus in December. In January, 1951, this man had several attacks of nocturnal retrosternal pain characteristic of angina pectoris, not relieved by nitroglycerine, and requiring morphine for relief. At this time he was started on dicumarol. He has been carried now for twenty-two months with a blood prothrombin level of approximately 30 per cent. He now has no angina pectoris. He has been maintained on 350 mgm. dicumarol weekly.

Case 3.—C. B., a man, aged fifty, had a coronary thrombosis in September, 1949, followed by period of freedom from symptoms. One year ago he had an attack of severe retrosternal constricting pain, coming on without exertion and persisting over a period of several hours. The pain recurred the following morning with the slightest exertion, and was characteristic of impending coronary thrombosis. The electrocardiogram was diagnostic of old posterior myocardial infarction with no acute changes noted. He was placed on dicumarol, 400 mgm. per week, maintaining the blood prothrombin level between 20-30 per cent. The pain was completely relieved without recurrence. Patient has been maintained on dicumarol therapy.

Case 4—R. B., a man, aged fifty-one, sustained a coronary thrombosis in April, 1946. After a six month's vacation, he was symptom-free until March, 1951. At this time he began having retrosternal pain with very limited exertion associated with moderate shortness of breath. The pain increased in severity, and prevented the performance of his usual occupation as a factory supervisor. He was started on dicumarol, 500 mgm. per week, and the blood prothrombin level was maintained between 25 and 35 per cent, with complete relief of the pain. He returned to full-time employment. He is still on ambulatory dicumarol therapy.

Case 5.—L. P., a man, aged fifty-six, had a questionable coronary thrombosis in 1940. In April, 1950, he had a massive posterior myocardial infarction with a marked drop in blood pressure, and was cyanotic for ten days. He subsequently recovered with only moderate shortness of breath on exertion. In November, 1950, he began definite attacks of retrosternal pain at night. Electrocardiogram showed no change. He was then placed on dicumarol with a dosage averaging 400 mgm. per week, and his blood prothrombin level was maintained between 20 and 30 per cent. While on dicumarol he had complete relief of the nocturnal retroesternal pain, and returned to full-time work. He developed a painful periarthritis of both shoulders which necessitated orthopedic treatment, and the dicumarol was discontinued. The pain recurred. dicumarol was started again, and relief of the anginal pain was immediate. He is maintained on 400 mgm. dicumarol weekly.

Case 6.—M. O., a forty-eight-year-old man, had a posterior myocardial infarction in June, 1945. He had a splanchnicectomy in 1946 with a subsequent average blood pressure of 160/100. In October, 1951, on marked exertion he had an attack of severe retrosternal pain, accompanied by profuse perspiration and associated with a shock-like state. Electrocardiogram revealed only an old posterior myocardial infarction and no recent change. He was placed on preventive dicumarol therapy, 500 mgm. per week, and his blood prothrombin level was mantained between 18 and 30 per cent. He has continued full-time employment since that time.

The foregoing group of cases are typical of the group of twenty-four patients whom we have maintained on this routine of preventive dicumarol therapy without serious complications and with good results. All these patients are living and gainfully employed.

Case 7.—We had one case, a man, aged fifty-five, who had a coronary thrombosis in July, 1950, and remained asymptomatic until August, 1951. He then began having typical angina of effort, which changed to angina at rest. He was placed on dicumarol, 700 mgm. per week, and his blood prothrombin level through October, 1951, remained at 30 per cent of normal. He then neglected to have a prothrombin time taken for seven weeks. His retrosternal pain increased in severity, and in November, 1951, he had a typical coronary thrombosis with electrocardiograph evidence of an anterior myocardial infarction. On admission to the hospital, his blood prothrombin level was found to be 58 per cent of normal. He was treated in the usual manner with increased dicumarol dosage, and subsequently recovered. At present, he still has severe exertional dypsnea.

The above case is representative of three patients whom we considered to have had poor results from inadequate preventive dicumarol therapy; lack of co-operation and other factors excluding complication necessitated discontinuing dicumarol therapy. We have had another group of three patients in whom the results are equivocal. The pain has been relieved but the patients have had to discontinue dicumarol because of major hemorrhage within the effective prothrombin level of 20 per cent to 30 per cent.

Discussion

It is our feeling that the use of dicumarol therapy requires a conscientious patient, and careful supervision by someone familiar with the dosage schedule and complications. In several patients on whom we have had to discontinue the dicumarol treatment, coronary thrombosis has resulted in a very short time. This has not been related to increased activity or any other changes in our routine therapy of coronary insufficiency. In the series treated here, all patients have been ambulatory and at full-time work.

Congestive heart failure, associated with hepatomegaly following coronary thrombosis, does lower the prothrombin level, and therefore leads to the need for more frequent prothrombin level determinations.

During the past two years we have been impressed with the response of twenty-four of the thirty treated patients with status angina or impending coronary thrombosis to dicumarol therapy. It has been a constant finding that adequate prothrombin levels of 30 per cent of normal were accompanied by relief of angina.

The mechanism of the relief is still speculative. Many clinicians feel that dicumarol has a definite vasodilating effect. We have had no deaths from coronary thrombosis in patients who have been receiving adequate dicumarol therapy. We have seen complications, chiefly hemorrhage, in approximately 10 per cent of the cases treated, and of this group approximately half were unable to tolerate further dicumarol therapy.

Several patients in this series have complained of vague epigastric distress coupled with nausea and even vomiting. This has occurred chiefly in the morning and does not appear related to prothrombin level. It occurred in one patient each morning if the dicumarol were taken in the evening, and was not noted if the dicumarol was taken after the noon meal. It appears that the nausea is definitely an effect of the blood level of dicumarol, not local gastric irritation, but in no instance has it been necessary to discontinue the drug because of this annoying side effect.

It is our impression that preventive dicumarol therapy has a more proper place in the therapeutics of coronary sclerosis than has been heretofore appreciated.

Summary

1. Thirty cases of impending coronary thrombosis and status angina have been treated with dicumarol therapy for a period of three months to two years.

2. Dramatic relief of anginal pain has resulted from adequate therapy.

3. Complications, chiefly hemorrhage, have occurred in 10 per cent of the patients observed.

4. No patient with an adequate prothrombin level (20 to 30 per cent) has had a coronary thrombosis under our observation.

5. Vague gastric symptoms have resulted from long continued dicumarol but they have not necessitated discontinuing the drug.

6. In three instances where the cooperation of the patient was not complete, thromboses resulted.

7. Relief of pain, particularly angina decubitus, has been so marked that it is our impression the drug has some definite vasodilating effect.

8. The ability of every patient adequately treated in this series to continue at work would appear to indicate more efficient coronary circulation.

9. It is our impression that preventive dicumarol therapy has a proper place in treatment of impending coronary thrombosis and status angina antecedent or subsequent to myocardial infarction.

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Leaks in the Dyke

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FAULTY use of Blue Cross has become a grave problem.

Data gathered during the past fifteen months point to a number of errors in utilization of hospital services chargeable to doctors. Some of these are due to pressure from the public and some to non-enforcement of contract limitations, but the remainder are due to laxity on the part of the doctor in distinguishing between true need and convenience.

The survey made by Dr. Harry F. Becker of Michigan Hospital Service under the supervision of the Medical Advisory Committee appointed by the Council of the State Society consisted of a study of some 12,000 consecutive, completed, clinical case records from hospitals in representative areas of the state. The sampling technique was planned by competent statisticians who also reviewed the final completed data and confirmed their validity. Rules were set up by the Advisory Committee providing that the individual hospital survey was to be carried out with the full knowledge and consent of its administrator and its Chief of Staff or Executive Committee. All records were to be kept so as not to identify patient or physician. Comparisons were made between cases covered by Blue Cross, commercial insurance, self-payment and welfare funds. Here are the essential findings:

The same type of faulty use was found in the commercial insurance cases as in the Blue Cross cases.

There were no significant differences between figures obtained in Wayne County and those outstate.

Faulty utilization was found due mainly to (1) overstay, (2) admissions for medical inventory, (3) hospitalization for convenience of patient or family and (4) excess use of drugs and laboratory and x-ray facilities.

Overstay existed when the figure for the average stay of the normal uncomplicated case plus one day was exceeded. Surgical and obstetrical cases catalogued quite readily but medical conditions were not so clear-cut. The complicated and less common conditions were classified as proper unless there was positive evidence to the contrary. Eighteen per cent of the Blue Cross cases studied overstayed a total of 2,516 days; 14.7 per cent of the commercial insurance cases overstayed 1,115 days; 7.3 per cent of the self-payment cases overstayed 470 days; and 1 per cent of welfare cases overstayed sixty-eight days.

While admissions for medical inventory or diagnostic study (where the patient is apparently not ill enough for hospitalization and receives no definitive treatment but does receive a number of laboratory and x-ray procedures) are not covered by the contract, their selection and exclusion is a complex matter. In this group, 11.7 per cent of the Blue Cross cases studied used 2,515 days; 10.5 per cent of the commercial insurance cases used 1,034 days; and 4.4 per cent of cases with no insurance used 538 days.

Hospitalization of convenience was found in a small group, mainly in hospitals with low census or no resident staff. Here were included aged, senile persons, some children whose parents were at work, several who boarded in the hospital but went to the doctor's office for daily treatment, and patients who remained in the hospital because the husband or family were away. Of 4,370 Blue Cross cases studied, 154 used up 750 days in this manner; of 2,418 commercial insurance cases, sixty-two used up 240 days; of 2,143 self-payment cases, nineteen used up thirty-one days; and of 156 welfare cases, five used up twenty-one days.

Excess use of drugs and laboratory and x-ray facilities, known to exist, was not studied to any degree because it involved encroachment on matters of professional judgment. However, it was not unusual to see costly medications continued without apparent indication for as long as three weeks because someone had forgotten to write a stop order. As for laboratory and x-ray studies, a small number of practicing physicians and a large number of interns and residents shoot the works in the hope that one or two of the tests will make the diagnosis.

It is evident, without further documentation, that those who refuse to recognize the profession's vital rôle in the maintenance of Blue Cross are boring from within and can breech the wall that has been built in the last fifteen years. Each doctor must become acutely aware of his share in the cost burden and enlist the co-operation of his patients in the proper use of the services made available by Blue Cross.

Dr. Reveno is Chairman of the Medical Advisory Committee to Michigan Hospital Service.

MICHIGAN CLINICAL INSTITUTE

SHERATON CADILLAC HOTEL, DETROIT

POPULAR "BLOCK SYSTEM" REPEATED

TIME	WEDNESDAY, March 10, 1954	TIME	THURSDAY March 11, 1954	TIME	FRIDAY March 12, 1954
A.M. 8:30	Registration Exhibits open	A.M. 8:30	Registration Exhibits open	A.M. 8:30	Registration Exhibits open
	Three SURGICAL Subjects		Four OBSTETRICS-GYNECOLOGY-PEDIATRIC Subjects	9:00	Annual Meeting Michigan Heart Association Members
9:00	Bentley P. Colcock, M.D., Boston, Mass.	9:00	Charles S. Stevenson, M.D., Detroit		Five HEART Subjects
9:30	Thomas Wilensky, M.D., Lansing	9:20	Tommy N. Evans, M.D., Ann Arbor	9:20	Stanley Gibson, M.D., Chicago, Illinois
9:50	Wallace H. Steffensen, M.D., Grand Rapids	9:40	James L. Wilson, M.D. Ann Arbor	9:50	Cameron Haight, M.D., Ann Arbor
10:10	Intermission to view exhibits	10:00	Intermission to view exhibits	10:10	Intermission to view exhibits
11:00	R. S. SYKES LECTURE Eugene P. Pendergrass, M.D. Philadelphia, Pa.	11:00	Wolf W. Zuelzer, M.D., Detroit	11:00	Albert J. Boyle, M.D., Detroit
11:30	DIABETES John H. Warvel, Sr., M.D., Indianapolis, Indiana	11:20	MICHIGAN FOUNDATION FOR MEDICAL AND HEALTH EDUCATION LECTURE Albert B. Sabin, M.D., Cincinnati, Ohio	11:15	Mark Nickerson, M.D., Ann Arbor
				11:35	George E. Wakerlin, M.D., Chicago, Illinois
12:00	Luncheon	12:00	Luncheon	12:00	Luncheon
P.M. 1:00-3:00	Color Television	P.M. 1:00-3:00	Color Television	P.M. 1:00-3:00	Color Television
3:00	Intermission to view exhibits	3:00	Intermission to view exhibits	3:00	Final intermission to view exhibits
	Five TRAUMA Subjects		Three INTERNAL MEDICINE Subjects (with surgical aspects)		Four MEDICINE-GENERAL PRACTICE Subjects
3:50	Herbert W. Harris, M.D., Lansing	3:50	H. Marvin Pollard, M.D., Ann Arbor	3:30	Maurice H. Seevers, M.D., Ann Arbor
4:05	Richard C. Schneider, M.D., Ann Arbor	4:10	George B. Eusterman, M.D., Detroit	3:50	Loren W. Shaffer, M.D., Detroit
4:20	Curtis M. Hanson, M.D., Kalamazoo	4:40	Friedrich W. Niehaus, M.D. Omaha, Neb.	4:10	Stanley F. Hampton, M.D., St. Louis, Missouri
4:35	Lloyd T. Iseri, M.D., Detroit			4:40	H. Houston Merritt, M.D., New York, New York
4:50	James E. Lofstrom, M.D., Detroit				
5:10	Discussion Conference	5:10	Discussion Conference	5:10	Discussion Conference
	No Scientific Meeting Wednesday evening		No Scientific Meeting Thursday Evening		End of 1954 Institute

NO REGISTRATION FEE FOR MSMS MEMBERS AT MICHIGAN CLINICAL INSTITUTE.

Know the Facts—and Spread Your Knowledge

Often during talks with our patients and other friends, conversation will turn to the cost of medical care, of hospitalization, or of the income of the doctor, as though these items were entirely out of proportion to the general costs of other services. How many of us have given these questions enough thought to refute charges that the lay public is being overcharged, and cannot afford good medical care? How many of these folks know that Michigan Hospital Service and Michigan Medical Service, "tops" in the voluntary health service field, are the direct result of the thinking, work, and financial sponsorship of the medical and hospital professions of this state. Members of the House of Delegates of the Michigan State Medical Society, as you may remember, are also the membership of Michigan Medical Service. Why not brag a little about Blue Cross and Blue Shield?

What are some of the facts and figures we can memorize and use to advantage? The total personal consumer expenditures for the year 1952 were $218,000,000,000. All expenditures classified under the health of the individual were $9,600,000,000 or 4.4 per cent. The doctors' share amounted to 24.8 cents of each dollar or roughly a quarter of it. This makes the average gross income of the medical doctors about $11,000 to $12,000 a year. The cost of maintaining a practice is between 35 and 40 per cent of the gross medical income. The rise in fees charged patients has been some 45 per cent during the recent period of inflation. In 1951 and 1952, 54 per cent of an average week's wages in industry was required to purchase the same amount of medical care and drugs that would have required an entire week's wages in the base period 1935-1939.

Hospital costs are still 1 per cent of the national income. Costs per diem have gone up in the past twenty years, but the time spent in the hospital per individual, due to advances in medical and surgical care, has decreased so that the total bill per patient is no more than it was in "the good old days."

Another item of interest: 80 per cent of American families have no medical debt at all, 17 per cent have debts of from $2.00 to $200.00, and 3 per cent have medical obligations in excess of $200.00. Perhaps some people are wrong when they state that the citizens of our country cannot afford medical care.

L. W. Hull

President, Michigan State Medical Society

President's



Message

Editorial

THE COUNCIL, THE OFFICERS, AND THE JOURNAL
of the
MICHIGAN STATE MEDICAL SOCIETY
extend to each and every member and reader the best of the Holiday Season's greetings and best and sincere good wishes for the New Year.

BLOOD PRESSURE STUDY

DR. Arthur M. Master and associates of New York, with the endorsement and aid of the New York Heart Association, The Mount Sinai Hospital (New York), The Metropolitan Life Insurance Company (New York) and the American Medical Association, have undertaken a statistical study of the blood pressure in people who are sixty-five years of age and over. In 1950, they published their results of a study of 74,000 gainfully employed persons up to the age of sixty-four, and this gave new and more accurate information as to what comprised "normal" for that group. Because of this, and because the number of old people in the United States is increasing year by year, and also because of the paucity of data in these groups, they are asking the co-operation of the physicians of this country.

From the AMA files, a list of 17,000 doctors geographically distributed throughout the country was obtained, and printed questionnaire cards were sent to them. These cards were made as clear and simple as possible, most notations being made by check marks in proper columns. Each physician is asked to fill out questionnaires for six newly examined persons: two in the 65 to 69 year group, two in the 70 to 74 year group, and two above the age of 75; one of the latter being over 80 if possible. The subjects are all to be in fairly good health and not bedridden, although they might have some chronic illness.

Prior to the author's previous study, it had generally been accepted that an etiologic relationship between hypertension and coronary occlusion exists in both sexes. However, using the limits of normal blood pressure newly established for those under sixty-five, it was shown that such a causal relationship exists only in women; in men, no important relationship between hypertension and coronary occlusion was found. Because of this and many other findings in this age group, it was felt that the relationship of hypertension to coronary sclerosis and occlusion, cardiac enlargement, valvular disease, calcification of the aorta, electrocardiographic abnormalities, hypercholesteremia and diabetes must be re-investigated in people over sixty-five.

With this concept we heartily agree, and we urge that physicians who have received the questionnaires fill them out at their earliest convenience and forward them to Doctor Master. Also, we would urge other physicians who were not sent the cards, to send a postcard request to "Blood Pressure Study," 11 East 100th Street, New York 29, N. Y., and questionnaires will be forwarded to them. This study is a most worthwhile endeavor, and for the very small amount of time for each of us to help, we can get a large amount of satisfaction of having "been on the team."

G.W.S.

GOLDEN GOOSE

THOUSANDS of the Doctors of Medicine now in Michigan were not old enough to know by personal knowledge anything of the practice of medicine before the time of the Blue Cross and Blue Shield. Before that era some people carried so-called health and accident policies which gave them an indemnity when accident or illness prevented them from working. Medical practice in those days was rugged. It took years to build a well-established and paying clientele. The hospital and doctor bills were likely to be the last ones paid, especially after the 1927 stock market crash and during ensuing years of depression.

Some far-seeing doctors and hospital administrators were wise enough to attempt an insurance program which the old insurance companies claimed could not succeed because health services were uninsurable. Blue Cross and Blue Shield

came into being, giving both hospital and medical care to the insured. They demonstrated that with wisdom and precaution the catastrophic ills of the people could be financed without bankrupting the victims. Hospital care and medical care became one of the respected and expected benefits to which most people looked with confidence. Hospitals could function without vast endowments, and medical men could care for their patients, fully expecting pay for their services promptly, rather than carrying charges on their books for months or years.

Times were good for the health care of our people. They could enter the hospital for serious illness or surgery free from financial worries. The beds, as well as the medical care, were awaiting use. Blue Cross and Blue Shield, which proved the insurability of health care, are the brain children of professional men, doctors and hospital administrators working together, in spite of the discouragement from insurance advisors. Our professions made these institutions and made them work to the great advantage of our patients and ourselves. They received the immediate endorsement and use from our patients. Not one of us who knew pre-Blue Cross-Blue Shield times would care to go back to our struggles fifteen or so years ago. The younger men, who have come into the health field since that time, should take advice from older practitioners.

We could be on the road back to the old and less pleasing years. Blue Cross and Blue Shield are our own offspring of necessity, our buoy of support, our bulwark of protection against the certain seizure by government if we fail. People have learned they may have health care. If these two great services fail, government management will surely be demanded and will be unhesitatingly assumed.

If this great and grand experiment fails, it will be because the incipient evils were not foreseen and promptly corrected by the only persons who can keep the services well—the M.D.'s. It is in the province of the Doctors of Medicine to keep the Blue Cross-Blue Shield strong bulwarks against socialism.

Blue Cross-Blue Shield Can Fail

We have reported to our membership on numerous occasions that there are abuses and sabotage at work in our midst. A committee appointed by the Council of the Michigan State Medical Society has been actively surveying our situation, hoping to propose a solution. The committee is still at work, but has made some startling revelations. Our two service corporations were intended to give essential and needful care and can well do so. They were not intended to carry unnecessary expenses, and cannot do so. About 12,000 hospital admissions have been carefully studied; the case records, medical orders, extra days, all being noted. So far, we have evidence of unnecessary usage costing almost ten million dollars for Blue Cross in the past year. The surface is only scratched.

Patients are sent into the hospital over the week end in order to hold a bed; patients are held one or two extra days in order to provide a bed for another of the doctor's patients; persons are hospitalized over the week end, or at some other time so the family can take a trip or celebrate without the hindrance of a member of the family who would be in the way. Every one of these extra days costs approximately thirty dollars, and that is YOUR MONEY. Why should a patient with a fractured wrist be given every blood and serological test, as well as gastrointestinal series.

Think it over, Doctor. Every policyholder is entitled to proper and essential care, but abuse will bring just one result. Every Blue Cross and Blue Shield plan is having the same difficulty if they are functioning as service organizations. This is not just a Michigan problem. It may be necessary to raise the premium rates which will ultimately bring ruin.

And all this is so *unnecessary*.

RELATIONS BETWEEN MEDICINE AND OSTEOPATHY

THE RELATIONS between Medicine and Osteopathy have been the subject of profound consideration for many years in Michigan as well as elsewhere in the nation. In 1947, we published four editorials in four succeeding numbers of The Journal, "What of Osteopathy?" A special committee appointed to make a thorough study of the subject held many meetings—some unofficially with osteopaths and was discontinued. But the subject gained attention at the national level.

The House of Delegates of the American Medical Association in annual session in New York,

June 1-5, 1953, after much study adopted the following report of the Reference Committee:

"1. That the House of Delegates declare that so little of the original concept of osteopathy remains that it does not classify medicine as currently taught in schools of osteopathy as the teaching of 'Cultist' healing.

"2. That the House of Delegates state that pursuant to the objectives and responsibilities of the American Medical Association which are to improve the health and medical care of the American people, it is the policy of the Association to encourage improvement in the undergraduate and postgraduate education of doctors of osteopathy.

"3. That the House of Delegates declare that the relationship of doctors of medicine to doctors of osteopathy is a matter for determination by the state medical associations of the several states and that the state associations be requested to accept this responsibility.

"4. That the Committee for the Study of Relations between Osteopathy and Medicine or a similar committee be established as a continuing body."

The committee report accepted included the following recommendation of the Board of Trustees:

"Because of the length of this report and the controversial nature of the subject, the Board feels that the House should have adequate time for study, and that the state associations should have opportunity to express their opinions. Therefore it is recommended that the Committee be continued, but the action on the report be deferred until the June, 1954, session. It is suggested that at that time the House be prepared to answer the following questions:

"1. Should modern osteopathy be classified as 'cultist' healing?

"2. Since the objectives of the American Medical Association include improvement in undergraduate and postgraduate education should doctors of medicine teach in osteopathic schools?

"3. Should the relationship of doctors of medicine to doctors of osteopathy be a matter of determination by the several state associations?"

The House of Delegates of the Michigan State Medical Society, in carrying out the provisions of these resolutions, became the first of the State Medical Societies to take official action, which it did with typical Michigan directness. The first three recommendations were considered. The first paragraph was widely discussed and amended. Several tie votes were taken before an acceptable wording was offered and adopted overwhelmingly. The final recording of the Michigan resolution was:

"1. That the House of Delegates of the American Medical Association declare so little of the original concept of osteopathy remains as currently taught in osteopathic schools that doctors of medicine may be permitted to teach in osteopathic schools without the stigma of unethical conduct."

After the first section was changed by our members, the second and third were voted by acclamation.

The Michigan State Medical Society has expressly stated its opinion, and is passing on to the American Medical Association its advice.

The Michigan House of Delegates is willing to have a part in the better education and better postgraduate education of osteopaths. We are willing to give medical educators the privilege to teach in osteopathic schools and exempt these teachers from the stigma now placed by the AMA Principles of Ethics. However, we have made *no commitment whatever about Practice between Doctors of Medicine and Osteopaths.* The Michigan profession has made a suggestion to the AMA, as per its invitation, but the American Medical Association must activate any such educational program.

The Michigan State Medical Society House of Delegates' action was merely advisory to the American Medical Association and in no way implies or condones *professional relations* or joint practice or consultation between Doctors of Medicine and osteopaths.

DEVOTED DOCTORS

ANOTHER annual session of the Michigan State Medical Society, its House of Delegates, and Committees has been held, and we must comment on the unrestricted service given. These officers and delegates gave up two or three days from their busy practice to go to Grand Rapids ahead of the scientific meetings and attend to the business and problems of the whole profession. They worked long hours, from early morning to late at night, in meetings, conferences and reference committees.

The members of The Council gave an extra day to this annual meeting, starting their work on Sunday noon. All of these members of the House

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Michigan State Medical Society Past Presidents 1903-1911



By 1911 the change from a rural to an urban economy was nearly completed. It was obvious that Michigan was committed to becoming a great manufacturing state. Foundries, machine shops and woodworking plants were pouring out Michigan-made goods in increasing quantities. Furniture, drugs, and chemicals were important products. The young automobile industry continued to strengthen its foundations: The Buick Company was organized in 1903, five years later to become the nucleus for a new firm called General Motors Corporation; the names of Packard and Hudson entered the field, and another company was assured of amazing success with the introduction of the Model T in 1909. Looking ahead, Michigan established a State Highway Department in 1905. Electric lights were more common in the homes of city dwellers, and in Medicine electricity was beginning to play an important role as the profession learned more and more about use of the x-ray.

EDITOR'S NOTE: Absence of MSMS presidents for 1880 and 1881 in the August picture layout caused some questions. Jeffrey R. Thomas, M.D., of Bay City, was President in 1880, and to date MSMS has been unable to find a photograph of Dr. Thomas for the Past Presidents Room at headquarters in Lansing. In 1881, James H. Jerome, M.D., of Saginaw, who was pictured as President in 1867, served his second term in that office.

(MSMS Presidents from 1912 to 1921 will be featured in an early number.)

Your Heart Association at Work

Henry L. Smith, M.D.
President, Michigan Heart Association



It is indeed gratifying to me that the Michigan State Medical Society once again has requested the Michigan Heart Association to assist in the development of this issue of THE JOURNAL which is devoted entirely to cardiovascular disease. On behalf of the Michigan Heart Association, I take this opportunity to extend our sincere thanks and grateful appreciation for this outstanding service. THE JOURNAL provides our Association with an excellent opportunity to keep Michigan's medical profession informed of the concerted attack being made on cardiovascular diseases by the Michigan Heart Association.

I believe that it is important that we be ever mindful of the fact that the Michigan Heart Association does not provide financial aid to any persons. The Association does, however, provide service to the physician in the care of his patients.

One example of this type of service are the Cardiac Homemaker Classes which have already served thirty-two different areas in Michigan and are being expanded rapidly to other areas. No medical care, advice, diagnosis, treatment or examination is given in these classes. The instructors, who are members of the Home Economics Staffs of Michigan State College and Wayne University, teach only work-simplification techniques, ideas and principles which are designed to show the homemaker disabled by heart disease how to conserve her time and energy. Heart patients are accepted only upon the referral of the attending physician.

The Rheumatic Fever Control Program of the Michigan State Medical Society receives its total financial support from the Michigan Heart Association. We are indeed pleased to be a part of this most worthwhile program which provides another outstanding example of service to the Doctor of Medicine.

Among the many other activities of the Michigan Heart Association is that of keeping the M.D. informed of the newest advances in research, diagnosis and treatment of cardiovascular diseases. This is accomplished through the Annual Michigan Heart Day Meeting which is held in conjunction with the Michigan Clinical Institute as well as the annual Heart Issue of THE JOURNAL.

Medical and scientific pamphlets on specific cardiovascular problems can be secured free of charge from the Association's office in Detroit. A brief description of such material is listed on subsequent pages of this issue of THE JOURNAL.

Destruction of age-old misconceptions about diseases of the heart and blood vessels, with a view to replacing them in the public's mind with truth and fact, is another prime objective of the Michigan Heart Association.

The major goal of the Heart Association is the financial sponsorship of research studies in the cardiovascular field. The funds made available for heart research in Michigan, combined with those of our parent organization, the American Heart Association (and its affiliates throughout the country), are now building an impressive total. Through the last five years, this nationwide cooperative effort of which we are a part has channeled more than $6,500,000.00 into research looking toward the conquest of heart and circulatory disease. Over $100,000.00 has been allocated by the Michigan Heart Association during the current fiscal year. These funds are made available to us through "United" fund-raising campaigns in many Michigan communities as well as through our Memorial Fund.

How quickly will this investment yield a return? Frankly, it is not known, for research does *not* operate according to a time-table. It is known that new, basic knowledge is being developed every day. Good and valid reasons indicate that important progress is being made.

It has been learned that the progress of research depends on our medical scientists. We are convinced that research is vital and that it justifies our continued support.

Hope is the underlying concept of *your* Heart Association as it contemplates the immensity of the tasks ahead. The challenge is great, the objective is worthy and the future is bright with promise.

Can Rheumatic Fever Be "Controlled"?

Leon Devel, M.D.
Medical Co-ordinator, MSMS Rheumatic Fever Control Program



Prevention, recognition, long-term management and education are the foundations on which a plan for the "control of rheumatic fever may be based." The Rheumatic Fever Control Committee of the Michigan State Medical Society endeavors to stimulate interest in each of these fields through a voluntary program of education and service under the financial sponsorship of the Michigan Heart Association.

Prevention, when this can be accomplished, is the ideal way of dealing with the morbidity, crippling and mortality resulting from disease. Witness the accomplishments of preventive medicine through sanitation, vaccination, immunization and other methods in many different types of disease. Since rheumatic fever and its sequelae of heart disease are peculiarly refractory to treatment once the disease process has been initiated or established in the individual, it would appear that if a method of treatment could be found which would forestall initiation of the train of events called rheumatic fever, the disease might possibly be prevented altogether.

It has become evident in recent years, through experimentation, clinical observation and statistical analysis in the general population as well as in selected groups such as Army camps and installations, that an infection with Group A hemolytic streptococcus very commonly appears to be *the* significant clinical event preceding the development of the rheumatic state. Evidence at hand points to a possible etiological relationship between the two. It is therefore reasonable to assume that prevention or early eradication of streptococcal infection will also frequently prevent an attack of rheumatic fever. Current reports by investigators in this field indicate that this is so in a large majority of instances. Early and energetic treatment of all hemolytic streptococcal infections with appropriate antibiotics is clearly indicated. The indications for treatment are doubly important in the child or young adult who has a positive family history of the disease, or in the individual who for a variety of reasons may have been "suspected." Desk Reference Card No. 2 offers suggestions.

Once rheumatic fever, with or without valvular heart disease, has been established, it is important to attempt to prevent the recurrences for which it is notorious. The observation that recurrences also frequently follow in the wake of an infection with the hemolytic streptococcus makes it imperative to prevent streptococcal infection by the continuous administration of prophylactic doses of a sulfonamide or appropriate antibiotic. Desk Reference Card No. 2 outlines a program of prophylaxis.

Recognition of the disease at its inception, as well as recognition of established cardiac lesions and recognition of the presence or absence of signs of activity of the rheumatic process are equally important in "control" because they will lead to prolonged observation and care in an effort to minimize the after effects. Correct diagnosis may be extremely difficult, especially in small children, and calls for the use of all available diagnostic means, both laboratory and clinical, now at our disposal. Over-diagnosis is also to be deplored because it often builds up unfounded fears of heart disease, sometimes with disastrous psychological results. The Rheumatic Fever Control Committee endeavors to help the physician in the matter of diagnosis through its Rheumatic Fever Diagnostic and Consultation Centers where he may refer his problem cases for review.

In known rheumatic fever, it is important to establish the presence or absence of cardiac involvement and its nature, and to determine whether according to present clinical and laboratory methods there is or is not evidence of continued activity. Recognition of these different aspects will then serve as a guide for treatment and management. Here again the physician may refer his patient to the Rheumatic Fever Diagnostic and Consultation Center for consultation and advice. He will receive a complete report of the consulting panel's findings and recommendations, but will retain responsibility for the management of the case.

Long-term Management.—The care of the chronic phases of rheumatic fever and rheumatic

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Cardiac Homemakers Program

Michigan State College

By Mrs. Ruth C. Kettunen

Department of Home Management
School of Home Economics



It is not necessary to purchase expensive equipment to benefit from the instruction in work-simplification given in the Cardiac Homemakers classes. Better use of the body is stressed as a way of saving energy and reducing fatigue. The course is built on the premise that it is not what the job is, but how it is done that counts in saving energy and reducing fatigue. Class members are most enthusiastic in stating that this positive approach to their homemaking job has given them new hope, encouragement and practical help.

These classes in work simplification for cardiac homemakers are conducted by the Michigan Heart Association in co-operation with the School of Home Economics and the Home Economics Extension Department of Michigan State College.

The Co-operative Extension Service employs county and district Home Demonstration Agents. These workers may select the work simplification classes as part of their program. When the Home Demonstration Agent schedules the classes she assumes responsibility for the local arrangements but the classes are taught by the work simplification instructor from Michigan State College. The Michigan Heart Association, through its executive secretary, contacts the local medical and health groups to obtain their approval and support. A comprehensive publicity program is also developed by the Heart Association in each area where the classes are scheduled.

In accepting enrollments, preference is given to heart patients but if the class is not filled by cardiac homemakers then other interested women may enroll. It has been difficult in some areas to enlist the active participation of local doctors to the point where they refer their heart patients to the classes, yet it is only when this is done that the women who can benefit the most are secured.

Since the spring of 1951 when this program was initiated on a statewide basis, thirty-two different communities have held cardiac classes and more than 1,000 women have attended.

We can only estimate the hundreds, very likely even thousands, of homemakers who have benefited indirectly from the program. This growth, together with the many new requests for these classes, indicate a growing interest.

The class instruction consists of a series of four lessons. No medical advice is given, but rather, the findings of time and motion studies are applied to the particular needs of the cardiac homemaker. Each cardiac patient is admitted to the classes only upon the referral of her attending physician.

RHEUMATIC FEVER "CONTROLLED"

(Continued from Page 1331)

heart disease often requires the use of specialized ancillary disciplines for the total care of the total patient: convalescent home, sanatorium or foster home care; home nursing, social, psychiatric, educational, occupational, vocational and rehabilitation services. These specialized services are available in many communities but frequently are unused. The Rheumatic Fever Diagnostic and Consultation Center may recommend one or more.

Education, or rather, information offers a fourth line of attack in the "control" of rheumatic fever. A well-informed medical profession, thoroughly aware of the protean nature of rheumatic fever and cognizant of the latest developments in diagnosis and therapy, constitutes the foundation for progress. The Rheumatic Fever Control Committee endeavors to provide the practicing physician with up-to-date information, as typified by the Physician's Desk Reference Cards for Rheumatic Fever published and distributed to the membership by the committee. Each represents a ready-reference summary of important aspects of the rheumatic fever problem. Education of the allied professions and education of the public based on a sensible free-from-fear approach falls within the province of activities of all Rheumatic Fever Diagnostic and Consulation Centers.

Conclusion.—A great deal can be done to "control" rheumatic fever.

Cardiac Homemakers Program

Wayne University

By Mrs. Frances Sanderson
Chairman
Home Economics Department



The Cardiac Homemakers program has served over five thousand people during the past three years through the presentation of demonstration kitchens, classes, and workshops. The work has been carried out by the Home Economics Department of Wayne University under a grant of funds from the Michigan Heart Association.

Our first challenge of 1953 was planning the overall layout and selecting the equipment for the "Easy-Does-It" Cardiac Kitchen at the request of the J. L. Hudson Company for exhibition at their annual housewares show. Hourly demonstrations of work simplification principles were given during the ten-day showing. Following each demonstration, cards and leaflets were distributed, offering the opportunity of enrolling in the work-simplification classes given at Wayne University.

With this major project completed, regular monthly classes were held for cardiac homemakers, presenting techniques to show how the cardiac homemaker can conserve her energy and follow her doctor's order to "take it easy." In addition to the many professional visitors who observed these classes, 424 cardiac patients have enrolled to date.

At the request of nineteen community groups, we presented the cardiac program to 1,254 adults, thus providing us with the opportunity of encouraging new enrolees in the classes. Cardiac patients are admitted to the classes only upon referral of their attending physician.

The Wayne County Health Department requested an all-day workshop for twenty-five recent polio patients. Thirty-eight professional visitors from eighteen co-operating agencies also attended.

Eleven programs were presented via television and radio.

Write-ups about the Cardiac Program in magazines and newspaper articles resulted in requests for information from eleven states and four foreign countries.

The fourth leaflet, entitled "Easy Working Heights," in the Easy-Does-It leaflet series, which illustrate principles of work simplification, is just completed. These leaflets have been reprinted by other agencies and translated into other languages. More than 5,000 leaflets have been distributed to individuals and agencies.

The "Take-It-Easy" movie, in production for over a year, is now completed. It enacts a chapter from the real life story of the first cardiac homemaker who was helped in the original pilot study. This movie is available on a free-loan basis from the Michigan Heart Association. It is another medium for explaining the services available through the Cardiac Homemakers Program.

DEVOTED DOCTORS

(Continued from Page 1328)

of Delegates, The Council and the officers serve without recompense to carry out the many demands of their fellow members, that the Michigan medical profession may be the best possible functioning body for the care of our patients, that we may have the very latest knowledge promptly and authoritatively.

The meeting of the House of Delegates occurs once a year, but it takes about a week of time away from the delegate's practice. The complete Council meets three times a year, devoting at least three days to each meeting, and much travel. The members of the Executive Committee of The Council give the most time—a meeting each month.

We doubt if any of our members fully appreciate the time and effort given by these men.

The Editor publishes this editorial, without the knowledge of the members of these groups, knowing full well they would never consent to it. Many times we hear mention of "political doctors;" not so with these hard workers. They should be the recipients of the highest praise—hence these words.

MICHIGAN HEART ASSOCIATION LITERATURE

For the Doctor of Medicine

EXAMINATION OF THE HEART.—A 17-page manual designed for the practitioner concerned with the diagnosis of cardiovascular diseases. The purpose of the booklet is to outline the clinical examination of the heart without the help of any instrument other than the stethoscope.

RECOMMENDATIONS FOR HUMAN BLOOD PRESSURE DETERMINATION BY SPHYGMOMANOMETER.—A 16-page booklet. A guide in the more precise standardization of methods and recording of human blood pressure. Recently revised by a committee under the chairmanship of Dr. Carl J. Wiggers, Professor of Physiology at Western Reserve University, Cleveland, Ohio.

DIAGNOSIS OF CONGENITAL CARDIAC DEFECTS IN GENERAL PRACTICE.—An 18-page booklet presents briefly the clinical and physiological findings and the indications for surgery in common congenital cardiac defects. It guides the physician on what can and cannot be accomplished with the means of clinical observation at his command in office practice and when special diagnostic procedures, such as cardiac catheterization and angiocardiography are needed.

RETURNING THE CARDIAC TO WORK.—A 20-page guide for private physicians emphasizing positive and practical aspects of returning the cardiac to work.

PREVENTION OF RHEUMATIC FEVER.—A 4-page reprint of the official recommendations of the Committee on Prevention of Rheumatic Fever appointed by the Council on Rheumatic Fever and Congenital Heart Disease of the American Heart Association.

CLASSIFICATION OF PATIENTS WITH HEART DISEASE.—Desk card embodying the functional capacity and therapeutic classification of patients with heart disease in a handy "blotter-size" card. Valuable in maintaining accurate clinical records. Use of this classification is highly rceommended. (Wall Chart also available.)

For the Lay Public

FOOD FOR YOUR HEART.—A 48-page manual available to laymen only upon the prescription of a Doctor of Medicine. Contains nine diets to cover varying levels of sodium restriction and of calorie intake. Of value to both patient and physician is Appendix which outlines schematically the sodium content of common foods, and lists natural sources of low sodium foods and salt substitutes.

HEART DISEASE AND PREGNANCY.—An 11-page booklet answers questions most women ask about heart disease and pregnancy.

HIGH BLOOD PRESSURE.—A 12-page booklet. Definition, measurement, cause, seriousness, possible danger and treatment.

DON'T WORRY ABOUT YOUR HEART.—A 5-page pamphlet. The reassuring message is backed up by a clear explanation of the physiology of the heart.

HEART DISEASE CAUSED BY CORONARY ARTERIOSCLEROSIS.—A 12-page booklet. Interesting examples and explanations of this common type of heart disease. Familiar terms are defined.

VARICOSE VEINS.—An 8-page pamphlet which is directed primarily to women.

HEART OF THE HOME.—A 28-page booklet. A 10-page introduction outlines in simple terms the principles of work-simplification and suggests how to apply them. Following this there are 18 pages of photographs showing ways to simplify kitchen work without investing much in equipment or carpentry.

HEART QUIZ.—A 12-page folder. Twenty questions about the human heart, correctly answered. Useful as audience participation device and general information piece.

101 QUESTIONS AND ANSWERS ABOUT YOUR CHILD'S HEART AND YOUR OWN.—A 10-page pamphlet designed for answering the general questions of people with an intelligent interest in cardiovascular diseases.

HOW TO LIVE WITH HEART TROUBLE.—A 32-page booklet provides encouraging and hopeful point of view for those persons afflicted with heart disease.

KNOW YOUR HEART.—A 31-page booklet. A brief résumé of the work of the heart and the diseases which attack it. Booklet concludes on hopeful outlook for cardiac sufferers plus research work being carried out by various organizations.

CHALLENGE OF HEART DISEASE.—A 16-page booklet. Excellent description of the five types of heart disease: Congenital, rheumatic, arteriosclerotic, hypertensive, and syphilitic. Summarizes achievements and needs in the field of heart disease.

WHAT YOU SHOULD KNOW ABOUT RHEUMATIC FEVER.—A 6-page folder. The facts about Rheumatic Fever and how to guard against it.

RHEUMATIC FEVER—CHILDHOOD'S GREATEST ENEMY.—A 31-page booklet. A complete word-picture about the causes and care of rheumatic fever patients.

WHAT THE CLASSROOM TEACHER SHOULD KNOW—AND DO—ABOUT RHEUMATIC FEVER.—A 10-page booklet. An excellent guide to aid the classroom teacher in assisting the medical doctor in detecting rheumatic fever in children. Excellent reading for parents also.

HEART CHART.—Schematic drawing of the heart. (17″ x 22″) Excellent for use by lecturer. Notebook size (8½″ x 11″) also available which is particularly suitable for distribution to groups.

HEART DISEASE IN CHILDREN.—A 15-page booklet provides information concerning prevention and treatment of rheumatic fever, rheumatic heart disease, and subacute bacterial endocarditis. Several pages are also devoted to an explanation of the three most common congenital heart defects.

All of the above pamphlets (both lay and professional) are available free of charge from the Michigan Heart Association. Use the handy "clip-out" coupon below so that you may order these pamphlets today.

Michigan Heart Association
4421 Woodward Avenue
Detroit 1, Michigan
Gentlemen:

Please send me the following pamphlets:

	Quantity Desired
☐ Examination of the Heart	.....
☐ Recommendations for Human Blood Pressure Determination by Sphygmomanometer	.....
☐ Diagnosis of Congenital Cardiac Defects in General Practice	.....
☐ Returning the Cardiac to Work	.....
☐ Prevention of Rheumatic Fever	.....
☐ Classification of Patients with Heart Disease (Desk Card)	.....
☐ Other	
.....	
.....	

..... M.D.
..... Address
..... City

MICHIGAN HEART ASSOCIATION MOTION PICTURES

1. **GUARD YOUR HEART**—Running time 27 minutes. 16 mm. black and white, sound story of a middle-aged, hard-driving executive who becomes worried about his heart. Film includes illustrated lecture on the heart and heart disease.
2. **HEART AND CIRCULATION**—16 mm. black and white, sound. Running time 10 minutes. Deals with the mechanism of the heart muscle, valve action, normal sounds, rate of beat, constriction, dilation and phenomena of blood pressure. For physiology classes and lay study groups.
3. **HEART TO HEART**—16 mm. black and white, sound. Running time 15 minutes. A dramatically illustrated commentary on the heart disease problem and the nature of heart association programs designed to meet that problem.
4. **WONDER ENGINE OF THE BODY**—16 mm. black and white, sound. Running time 11 minutes. This film is the animation section of "Guard Your Heart." Particularly useful for High Schools, service clubs, etc.
5. **THE MECHANICAL HEART**—16 mm. black and white, sound kinescope of national television program concerning the artificial heart pump. Running time 30 minutes. An outstanding documentary type of film dealing with the mechanical heart pump which was acclaimed one of the top ten scientific developments of 1952.
6. **NEW HOPE FOR HEARTS**—16 mm. color, sound. Running time 17 minutes. The film deals with the research activities of the Michigan Heart Association. It shows how research eventually contributes to the care, diagnosis and treatment of all heart patients.
7. **ROUND TRIP**—16 mm. black and white, sound. Running time 14½ minutes. A father tells what happens to his family when rheumatic fever gets two strikes on a young ball player; the film shows how the Heart Association serves the Doctor of Medicine in helping to bring about the child's recovery.
8. **TAKE IT EASY**—16 mm. color, sound. A dramatic true story of a woman cardiac patient who attends the Association's Cardiac Homemaker Classes and learns how to follow her doctor's prescription of "Take It Easy." Film shows many of the work-simplification techniques and ideas which are taught in the "classroom."
9. **COURT OF HEALTH**—16 mm. sound, black and white kinescope. Produced by the Michigan Health Council and dealing with the association's Cardiac Homemaker's Program.

All of the above films are available on a free basis by writing to the Michigan Heart Association, 4421 Woodward Avenue, Detroit 1, Michigan.

MICHIGAN HEART ASSOCIATION RESEARCH GRANTS 1952-1953

* 1. WAYNE UNIVERSITY COLLEGE OF MEDICINE—Lloyd T. Iseri, M.D.....$ 8,600.00
Fluid and Electrolyte Metabolism in Edema Formation Due to Cardiac and Renal Causes.

* 2. WAYNE UNIVERSITY COLLEGE OF MEDICINE—Harper K. Hellems, M.D. 8,800.00
Hemodynamic Aspects of Cardiac and Pulmonary Disease.

* 3. WAYNE UNIVERSITY COLLEGE OF MEDICINE—Albert J. Boyle, M.D..... 6,800.00
Plasma Colloid Stability in Normal and Atherosclerotic Subjects.

4. HARPER HOSPITAL—F. D. Dodrill, M.D. 6,000.00
Mechanical Heart-Lung Mechanism.

5. UNIVERSITY OF MICHIGAN—James L. Wilson, M.D..... 7,000.00
Investigation of the Effects of Cyanotic Heart Disease and Its Relief on Cerebral Function.

6. HENRY FORD HOSPITAL—Conrad Lam, M.D..... 7,500.00
Experimental Cardiovascular Surgery.

7. UNIVERSITY OF MICHIGAN—Franklin D. Johnston, M.D..... 3,000.00
Special Electrocardiographic Studies and Cardiac Vibrations.

8. UNIVERSITY OF MICHIGAN—Sibley W. Hoobler, M.D..... 5,400.00
Continuation Study—Pressor Substances in Hypertension.

9. BLODGETT MEMORIAL HOSPITAL—Noyes L. Avery, M.D..... 1,000.00
Rheumatic Fever Treated with Steroids.

10. HENRY FORD HOSPITAL—J. A. Johnston, M.D..... 5,000.00
Nutritional Studies in Rheumatic Fever and Rheumatoid Arthritis.

11. UNIVERSITY OF MICHIGAN—F. E. Shideman, M.D..... 4,000.00
Energy Sources for the Renal Tubular Transport of Sodium.

12. UNIVERSITY OF MICHIGAN—Cameron Haight, M.D..... 3,000.00
The Function of the Respiratory System as Influenced by Heart Disease and a Correlation of Pulmonary and Cardiac Function Before and After Pulmonary Resection.

13. HARPER HOSPITAL—H. C. Saltzstein, M.D., and S. R. Scheinberg, M.D. 6,310.00
Study of the Effects of Cortisone Upon Experimentally Produced Myocardial Infarcts (Dogs).

14. GRACE HOSPITAL—James Blodgett, M.D. 2,780.00
The Fundamental Problem of Exploring Satisfactory Means of Entrance and Exit Through Walls of the Great Vessels and the Heart Itself.

15. WAYNE UNIVERSITY COLLEGE OF MEDICINE—Walter A. Seegers, M.D. 9,550.00
Blood Coagulation: Chemical and Metabolic Studies on Antithrombin-Accelerator.

16. UNIVERSITY OF MICHIGAN—Theodore Brody, Ph.D..... 3,000.00
Metabolic Effects of the Cardiac Glycosides on Heart Mitochondria.

17. PROVIDENCE HOSPITAL—Norman E. Clark, M.D..... 4,150.00
The Chemotherapy of Rheumatic Fever.

TOTAL $91,890.00

*Formerly part of project of Gordon B. Myers, M.D., Wayne University.

1953-54

1. HARPER HOSPITAL—F. D. Dodrill, M.D. ..... $ 7,200.00
   Mechanical Heart.
2. HARPER HOSPITAL—R. A. Gerisch, M.D. 4,200.00
   Clinical Investigation of the Effect of Cortisone in Acute Myocardial Infarction.
3. HENRY FORD HOSPITAL—J. A. Johnston, M.D. 5,000.00
   Nutritional Studies in Children with Rheumatic Fever.
4. HENRY FORD HOSPITAL—Conrad Lam, M.D. 7,500.00
   Experimental Cardiovascular Surgery.
5. UNIVERSITY OF MICHIGAN—David F. Bohr, M.D. 5,500.00
   Factors Responsible for the Appearance of VEM in the Plasma of Normotensive, Hyperreactor and Hypertensive Subjects.
6. UNIVERSITY OF MICHIGAN—Cameron Haight, M.D. 3,000.00
   The Function of the Respiratory System as Influenced by Heart Disease and a Correlation of Pulmonary and Cardiac Function before and after Pulmonary Resection.
7. UNIVERSITY OF MICHIGAN—Sibley W. Hoobler, M.D. 9,160.00
   Studies in Hypertension.
8. UNIVERSITY OF MICHIGAN—Franklin D. Johnston, M.D. 3,000.00
   Special Electrocardiographic Studies, Low Frequency Vibrations over Precordium and Ballistocardiographic Studies.
9. UNIVERSITY OF MICHIGAN—Mark Nickerson, M.D. 5,800.00
   The Response to Vasoconstrictor and Vasodilator Agents in Shock, with Particular Reference to Shock Induced by Coronary Occlusion and Bacterial Toxins (New).
10. WAYNE UNIVERSITY—Albert J. Boyle, M.D. 7,500.00
    Plasma Colloid Stability in Normal and Atherosclerotic Subjects.
11. WAYNE UNIVERSITY — Harper Hellems, M.D. 10,500.00
    The Investigation of the Effects of Exercise and Commonly Used Cardiovascular Drugs on Myocardial Blood Flow and Metabolism in the Human Subject.
12. WAYNE UNIVERSITY—Lloyd T. Iseri, M.D. 10,300.00
    Fluid and Electrolyte Metabolism in Edema Formation Due to Cardiac and Renal Causes.
13. WAYNE UNIVERSITY—Walter H. Seegers, Ph.D. 9,730.00
    Blood Coagulation Chemical and Metabolic Studies on Antithrombin-Accelerator.
14. UNIVERSITY OF MICHIGAN—James L. Wilson, M.D. 2,800.00
    Investigation of the Effects of Cyanotic Heart Disease and its Relief on Cerebral Function.
15. UNIVERSITY OF MICHIGAN—Mark Nickerson, M.D. 1,500.00
    States of Activity of the Autonomic Nervous System and Their Relation to Vascular Homeostosis.
16. WAYNE UNIVERSITY — Prescott Jordan, Jr., M.D. 5,205.00
    Prosthetic Replacement or Correction of Valvular Lesions.
17. UNIVERSITY OF MICHIGAN—Theodore M. Brody, Ph.D. 1.000.00
    Metabolic Effects of the Cardiac Glycosides on Heart Mitochondria.
18. PROVIDENCE HOSPITAL—Norman E. Clarke, M.D. 2,075.00
    The Chemotherapy of Rheumatic Fever.

Total $100,970.00

MICHIGAN HEART ASSOCIATION

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(*Deceased)

Wayne University College of Medicine

Postgraduate Continuation Courses

December 7, 1953—March 13, 1954

These courses are open to all qualified persons.

Veterans receiving benefits under the G.I. Bill should contact Dr. Arthur Johnson, Veterans Administrator at Wayne University, 5524 Cass Avenue.

Registration for these courses should be made in the office of Postgraduate Medical Education at the College of Medicine, 1512 St. Antoine, *before December 5.*

MICROBIOLOGY

Seminar	College of Medicine No. 104 625 Mullett	Tues. 3:30-5	$15.00

PHYSIOLOGY AND PHARMACOLOGY

Seminar	College of Medicine	Tues. 4-5	$15.00
Blood (Two Quarters)	College of Medicine	Thur. 3-5	$30.00
Endocrinology	College of Medicine	Thur. 4-5	$15.00
Cellular Physiology	College of Medicine	Tues. 3-4 Fri. 8-12	$30.00

PHYSIOLOGICAL CHEMISTRY

Seminar	College of Medicine	Thur. 3:30-4.30	$15.00
Intermediary Metabolism	College of Medicine	Fri. 1-2	$15.00

PATHOLOGY

Beginning Hematology	College of Medicine	Mon. 1-5	$50.00

DERMATOLOGY

Seminar in Dermatology	Receiving Hospital Farwell Annex	Weds. 10-12	$15.00
Seminar in Dermopathology	Receiving Hospital Dept. of Pathology	Fri. 1-2	$15.00
Superficial Mycoses	Receiving Hospital 4th Fl. Lab—Mycology	Weds. 12-2	$30.00

INTERNAL MEDICINE

Medical Conference (Limit 15)	Receiving Hospital No. 243 Farwell Annex	Thurs. 5-6	$15.00
Gastroenterology Clinic (Limit 10)	Receiving Hospital No. 243 Farwell Annex	Sat. 8-9	$15.00
Medical Seminar	Receiving Hospital No. 243 Farwell Annex	Mon. 5-6	$15.00
Medical X-Ray Conference (Limit 10)	Receiving Hospital No. 243 Farwell Annex	1st, 3rd & 5th Tues. 11-12	$15.00
Medical Pathologic Conf. (Limit 10)	Receiving Hospital No. 243 Farwell Annex	Wed. 11-12	$15.00
Hematology Clinic	Receiving Hospital	Wed. 1-3	$15.00
Review of Clinical Hematology	Receiving Hospital	Tues. 3-5	$15.00

SURGERY

Seminar	College of Medicine	Mon. 4-5	$15.00

ONCOLOGY

Cancer Detection	Yates Clinic	Wed. 3-5	$25.00

Michigan State Medical Society

Eighty-Eighth (1953) Annual Session

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(e) On Constitution and By-Laws 1368
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Michigan State Medical Society

Eighty-eighth Annual Session

DIGEST OF PROCEEDINGS OF THE HOUSE OF DELEGATES

MONDAY MORNING SESSION

September 21, 1953

The 88th Annual Session of the House of Delegates of the Michigan State Medical Society convened in the Pantlind Hotel, Grand Rapids, Michigan, at ten-twenty o'clock, R. H. Baker, M.D., Speaker of the House, presiding.

I. RECORD OF ATTENDANCE

Office	*Officer*	*Meetings*				
		1st	*2nd*	*3rd*	*4th*	*5th*
Speaker	R. H. Baker, M.D.	x	x	x	x	x
Vice Speaker	J. E. Livesay, M.D.	x	x	x	x	x
Secretary	L. Fernald Foster, M.D.	x	x	x	x	x
Immediate Past President	O. O. Beck, M.D.	x	x	x	x	x
County	*Delegate*					
1. Allegan	L. F. Brown, M.D.	x	x	x	x	x
2. Alpena-Alcona-Presque Isle	E. S. Parmenter, M.D.	x	x	x	x	x
3. Barry	A. B. Gwinn, M.D.	x	x	x	x	x
4. Bay-Arenac-Iosco	O. J. Johnson, M.D.	x	x	x	x	x
	W. S. Stinson, M.D.	x	x	x	x	x
5. Berrien	F. A. Rice, M.D.	x	x	x	x	–
	D. W. Thorup, M.D.	x	x	x	x	x
6. Branch	H. J. Meier, M.D.	x	x	x	x	x
7. Calhoun	H. C. Hansen, M.D.	x	x	x	x	x
	S. T. Lowe, M.D.	x	x	x	x	x
8. Cass	S. L. Loupee, M.D.	x	x	x	x	x
9. Chippewa-Mackinac	W. F. Mertaugh, M.D.	x	x	x	x	x
10. Clinton	F. W. Smith, M.D.	x	x	x	x	x
11. Delta-Schoolcraft	W. A. Lemire, M.D.	Not Represented				
12. Dickinson-Iron	L. E. Irvine, M.D.	x	x	–	x	x
13. Eaton	P. H. Engle, M.D.	x	x	x	–	–
14. Genesee	F. W. Baske, M.D.	x	x	x	x	x
	L. M. Bogart, M.D.	x	x	x	x	x
	R. M. Bradley, M.D.	x	x	x	x	x
	C. W. Colwell, M.D.	x	x	x	x	x
	F. D. Johnson, M.D.	x	x	x	x	x
15. Gogebic	D. C. Eisele, M.D.	x	x	x	x	–
16. Grand Traverse-Leelanau-Benzie	D. G. Pike, M.D.	x	x	x	x	x
17. Gratiot-Isabella-Clare	M. G. Becker, M.D.	x	x	x	x	x
18. Hillsdale	A. W. Strom, M.D.	x	x	x	x	x
19. Houghton-Baraga-Keweenaw	J. T. P. Wickliffe, M.D.	x	x	x	x	x
20. Huron	C. W. Oakes, M.D.	x	x	x	x	–
21. Ingham	K. H. Johnson, M.D.	x	x	x	x	x
	O. B. McGillicuddy, M.D.	x	x	x	–	x
	F. L. Troost, M.D.	x	x	x	x	x
	J. M. Wellman, M.D.	x	x	x	x	–
22. Ionia-Montcalm	W. L. Bird, M.D.	x	x	x	x	x
23. Jackson	C. R. Lenz, M.D.	x	x	x	x	–
	N. D. Munro, M.D.	x	x	x	x	–
24. Kalamazoo	I. W. Brown, M.D.	x	x	x	–	x
	F. C. Ryan, M.D.	x	x	x	x	x
	W. A. Scott, M.D.	x	x	x	x	x
25. Kent	L. C. Carpenter, Jr., M.D.	x	x	x	x	x
	G. W. DeBoer, M.D.	x	x	x	x	x
	W. J. Fuller, M.D.	x	x	x	x	x
	W. B. Mitchell, M.D.	x	x	x	x	x
	Andrew Van Solkema, M.D.	x	x	x	x	x
	A. V. Wenger, M.D.	x	x	x	x	x
26. Lapeer	D. J. O'Brien, M.D.	x	x	x	x	x
27. Lenawee	George Wilson, M.D.	x	x	x	x	x
28. Livingston	H. C. Hill, M.D.	x	x	x	x	x
29. Luce	T. W. Thompson, M.D.	–	–	–	–	x
30. Macomb	Sidney Scher, M.D.	x	x	x	x	x
31. Manistee	E. A. Oakes, M.D.	x	x	x	x	x
32. Marquette-Alger	A. S. Narotzky, M.D.	x	x	x	x	x
33. Mason	H. G. Bacon, M.D.	x	x	x	x	–
34. Mecosta-Osceola-Lake	Paul Ivkovich, M.D.	x	x	x	x	x
35. Menominee	J. R. Heidenreich, M.D.	x	x	x	x	x
36. Midland	M. J. Ittner, M.D.	x	x	x	x	x
37. Monroe	T. A. McDonald, M.D.	x	x	x	x	x
38. Muskegon	R. D. Risk, M.D.	x	x	x	x	x
	N. W. Scholle, M.D.	x	x	x	x	x
39. Newaygo	J. P. Klein, M.D.	x	x	x	x	x
40. North Central	L. F. Hayes, M.D.	x	x	x	x	x
41. Northern Michigan	J. R. Rodger, M.D.	x	x	x	x	x
42. Oakland	E. W. Bauer, M.D.	x	x	x	x	x
	E. B. Cudney, M.D.	x	x	x	x	x
	H. A. Furlong, M.D.	x	x	x	x	x
	F. J. Kemp, M.D.	x	x	x	x	x
	J. M. Markley, M.D.	x	x	x	x	x
43. Oceana	W. G. Robinson, M.D.	Not Represented				
44. Ontonagon	H. B. Hogue, M.D.	Not Represented				
45. Ottawa	D. C. Bloemendaal, M.D.	x	x	x	x	x
46. Saginaw	M. F. Bruton, M.D.	x	x	x	x	x
	J. P. Markey, M.D.	x	x	x	x	x
	A. C. Stander, M.D.	x	x	x	x	x
47. St. Clair	J. F. Beer, M.D.	x	x	x	x	x
48. St. Joseph	S. A. Fiegel, M.D.	x	x	x	x	x
49. Sanilac	J. J. McCrea, M.D.	x	x	x	x	–
50. Shiawassee	C. L. Weston, M.D.	x	x	x	x	x
51. Tuscola	L. L. Savage, M.D.	x	x	x	x	x
52. Van Buren	W. R. Young, M.D.	x	x	x	x	x
53. Washtenaw	P. S. Barker, M.D.	x	x	x	x	x
	O. K. Engelke, M.D.	x	x	x	x	x
	H. F. Falls, M.D.	x	x	x	x	x
	R. W. Teed, M.D.	x	x	x	x	x
54. Wayne	Raphael Altman, M.D.	x	x	x	x	–
	W. W. Babcock, M.D.	x	x	x	x	x
	H. E. Bagley, M.D.	x	x	x	x	x
	G. S. Bates, M.D.	x	x	x	x	x
	C. D. Benson, M.D.	x	x	x	x	x
	E. A. Bicknell, M.D.	x	x	x	x	x
	J. B. Blodgett, M.D.	x	x	x	x	–
	W. L. Brosius, M.D.	x	x	x	x	x
	C. L. Candler, M.D.	x	x	x	x	x
	W. S. Carpenter, M.D.	x	–	x	x	x
	E. G. Cochrane, M.D.	x	x	x	x	x
	J. E. Croushore, M.D.	x	x	x	x	x
	M. A. Darling, M.D.	x	x	x	x	x
	H. F. Dibble, M.D.	x	x	x	x	x
	H. B. Fenech, M.D.	x	x	x	x	x
	E. H. Fenton, M.D.	x	x	x	x	–
	R. F. Fenton, M.D.	x	x	x	x	x
	W. L. Foster, M.D.	x	x	x	x	x
	P. C. Gittins, M.D.	x	x	x	x	x
	C. K. Hasley, M.D.	x	x	x	x	x
	J. E. Hauser, M.D.	–	–	–	–	x
	L. T. Henderson, M.D.	x	x	x	x	x
	R. A. Johnson, M.D.	x	x	x	x	x
	E. D. King, M.D.	x	x	x	x	x
	E. G. M. Krieg, M.D.	x	x	x	x	x
	L. R. Leader, M.D.	x	x	x	x	–
	J. J. Lightbody, M.D.	x	x	x	x	–
	E. C. Long, M.D.	x	x	x	x	x
	E. F. Lutz, M.D.	x	x	x	x	x
	G. Thomas McKean, M.D.	x	x	x	x	x
	J. G. Molner, M.D.	x	x	x	x	x
	R. L. Novy, M.D.	x	x	x	x	–
	E. A. Osius, M.D.	x	x	–	x	–
	C. I. Owen, M.D.	x	x	x	x	x
	G. C. Penberthy, M.D.	x	x	x	x	x
	W. S. Reveno, M.D.	x	x	x	x	x
	F. P. Rhoades, M.D.	x	x	x	x	x
	J. H. Schlemer, M.D.	x	x	x	x	x
	E. D. Spalding, M.D.	x	x	x	x	x
	D. I. Sugar, M.D.	x	x	x	x	–
	K. L. Swift, M.D.	x	x	x	x	x
	E. C. Texter, M.D.	x	x	x	x	x
	C. E. Umphrey, M.D.	x	x	x	x	x
	R. V. Walker, M.D.	x	x	x	x	x
	P. J. Waltz, M.D.	x	x	x	–	–
	F. A. Weiser, M.D.	x	x	x	x	x
	D. A. Young, M.D.	x	x	x	x	x
55. Wexford-Missaukee	R. V. Daugherty, M.D.	x	x	x	x	x

INTRODUCTION OF GUESTS

THE SPEAKER: I wish to introduce four distinguished guests.

Dr. Glenn Sawyer, Secretary of the Ontario Society.

Dr. A. M. Vaughan, President-elect of the Illinois State Society.

Mr. Earl R. Thayer, Assistant Secretary of the Wisconsin State Society.
Mr. James A. Waggoner, Executive Secretary of the Indiana State Society.

We welcome you gentlemen. We are pleased to have you here. If you will sit through our deliberations, you will find that our problems are probably much the same as yours.

IN MEMORIAM

Another obligation which the Chair has assumed in past years is the announcement of the names of delegates or alternate delegates and former officers of the Society who have passed on to their future reward. I shall read those names, and then ask you to stand for a moment in silence in respect to their memory.

Allegan County—Orrin D. Hudnutt, Alternate.
Dickinson-Iron County—William Fiedling, Norway, Alternate.
Genesee County—Frank E. Reeder, Flint.
Ionia-Montcalm County—C. T. Pankhurst, Ionia, Alternate.
Kent County—L. O. Grant, Grand Rapids, Alternate.
Lenawee County—H. H. Hammel, Tecumseh.
Luce County—Henry E. Perry, Newberry, Past President.
St. Joseph County—Fred R. Reed, Three Rivers, Alternate.
Washtenaw County—S. L. LaFever, Ann Arbor, Alternate.
Wayne County—Rome Q. DeTomasi, Detroit, Alternate.
Oakland County—Oliver R. MacKenzie, Walled Lake.
Mecosta County—Gordon H. Yeo, Big Rapids.

Gordon Yeo, Big Rapids, has been a Delegate, and originally introduced the resolution which we shall consider today—a report on health and accident coverage for group policies for this Society.

The one which I regret very much to have to announce is the loss of our own Oakland County President, Dr. Oliver MacKenzie, who was President at the time of his death, and had been a Delegate and Alternate from Oakland County.

[*The audience arose in respectful silence.*]

II. SPEAKER'S ADDRESS

By R. H. Baker, M.D., Pontiac

I have no formal address, again, as I did not have last year.

I'm sorry the Handbooks didn't reach us a little earlier, so you could really study them and acquaint yourselves with the Council report, particularly, and with the committee reports. They are printed there, in full.

At the end are the Constitution and By-Laws, and almost every year—and this year will be no exception—there will be some motions to amend or change the By-Laws. They are there for your convenience.

I simply want to point out a few things which I think should get your attention. I do not wish to take any of the time of the speakers who will follow, who may see fit to review our accomplishments in the past and point out some trends for the future. These are much more important than what I have to say.

There will be one or two special reports which will be introduced which require no particular action at this time. As one of them, at the end of the Council report, Dr. Reveno will be called upon to read an interim report of his study committee as presented to the Council last summer, with a few of the resolutions which may come before us.

Many of you are interested in the question of providing surgical assistants' fees, and I understand, also, in providing a fee for consultation. You will find a report of that committee on page 148.

You will find a report of the Basic Science Study Committee on page 131. That is a committee which was appointed with the very explicit personnel requested by the Council last year. They are expected to give you a report of their views as to how the Basic Science Law has worked since the last amendment.

You have asked for a report of the committee studying simplified insurance reporting forms. You will find reference to that on pages 71, 72 and 73.

You have asked for a resolution in the past on expert testimony, and the effort at legislation is reported on page 73. That failed to pass after the first consideration.

I call your attention to the favorable legislation on temporary licensing which is reported on page 74.

Those things come up year after year. There are always new ideas, and I think we are making considerable headway.

I understand there will be a resolution pertaining to the Klein report. I think all of you have been circularized. The proposer of this resolution will read it by title; it will go to the proper reference committee, and you will have an opportunity to discuss it.

I know there will be a resolution pertaining to VA matters, particularly non-service-connected disabilities. This is a very important issue, because the House of Delegates of the AMA lays it in the lap of the executive office in Chicago, and it would appear from our recent conferences that the best interests of our Society and the societies of the nation may not be best served by the program that they are following. There will be a resolution on that.

I don't know if there are any resolutions on a national basis, but I think there are some things we should be thinking about very carefully in that connection, including the adjusting of service insurance, for instance, and the matter of catastrophic illness. Secretary Hobby, in a recent address, has pointed out that the service policies which we sell in Michigan, and which are sold around the nation, do not adequately provide for catastrophic illness and prolonged illness. We still have to do a lot of very careful thinking as to whether our Blue Shield and Blue Cross have all the answers. Should we extend our insurance for longer periods of time on matters of tuberculosis, polio, long, protracted illnesses, psychiatric conditions? If we do that, in order to pay for it, what can we cut out at the beginning on the lesser services, the emergency services? I have no answer to it at this time. It has been discussed repeatedly in medical groups, and it has been before the Board of Directors and in committee of the Michigan Medical Service, but it is still an open question as to what is the best direction for us to take.

We are also interested in the question of whether or not doctors need or want social security as individuals. We should be interested in the type of relief program—the so-called Jenkins-Keogh Bill for annuity programs—which applies very definitely to doctors.

I don't want to let us forget the important part that we took in Michigan—Dr. Umphrey, in particular, and Dr. Ralph Johnson—in presenting Michigan's experience to the Magnuson Commission.

There are many other items in the handbook which merit your attention. There is a very long, comprehensive and thorough report by Dr. Sladek on the question of migrant labor, their care, their health problems, and it is very well worth your study.

I think I have nothing else that I wish to call to your attention. I shall try to save the time of this body for discussions.

I urge that if you have something to say, that you correlate your thoughts and organize them in such a way that you can speak your mind the first time you stand up. I shall definitely try to discourage men from constantly popping up and saying the same thing over again. That has happened often in the past, and it probably will happen again.

We shall welcome your opinions. You will not be denied the recognition of the Chair, but in your discussion, please try to organize your thoughts and say what you have to say, and then let somebody else take the floor.

* * *

The Speaker's Address was referred to the Reference Committee on Officers' Reports.

THE SPEAKER: It is now my pleasure to introduce our President, Dr. R. J. Hubbell, who will give his annual President's Address. Dr. Hubbell.

III. PRESIDENT'S ADDRESS

By R. J. Hubbell, M.D., Kalamazoo

I have the pleasure and honor, gentlemen, of greeting you as president of your great society, the office I shall hold for a few more days. I am not unmindful of the reward you bestowed on me a year ago, but the record of accomplishment of the society during the last year, to be reported to you during this meeting, is awarded to you as delegates, to the councilors, to many hard working members of committees, and to our executive staff. To all these go my special word of thanks.

I am certain you all realize that medicine is not only in the forefront with scientific accomplishment, but we are being buffeted with criticisms, interviews, blatant headlines that perhaps are pretty hard to take at times. However, this is a country, thank God, where people are allowed to think and put their thoughts into print. I believe we too certainly have a right to present our side of the case, but let us observe the straws in the wind, and perhaps we can learn to separate the wheat from the chaff and pick out the constructive criticisms to help correct some of our own ills.

I know you will agree that this cannot be a static medical society. We must be resilient in our functions so that we can respond to the needs of the times and the society in which we live. This resiliency had best be developed primarily in the individual physician's office. I cannot stress this too strongly, that all facets of good medical public relations and good medical business practices begin there—and not only should be practiced by the young physician building his practice but, for the welfare of our profession, must also include the "too-busy" well-established practitioner and the financially and position secure salaried physician.

Next in importance is the county society and here, I believe, must be assumed a greater responsibility in its contact with the public. Some of the societies are doing a good job, and I would like to compliment now the Genesee County Medical Society on its handling of a difficult situation in connection with their recent tragic tornado. One way of achieving this end is to make it easier for the public to reach our county societies as an organization. All cannot have an executive office and secretary (although several more perhaps could do so), but at least a telephone listing of one of the responsible officers specifically designating him as representing the county medical society could be accomplished in every telephone directory in Michigan. And too, every county society should have an active mediation committee and it should be publicized that such a committee exists and functions promptly when called upon to do so. This activity will stop at the source many criticisms that make headlines when they reach state or national levels. Our state society public relations program is functioning splendidly and has done some outstanding pioneer work, but it can never replace that of the individual physician and his county society.

I feel it can be stated that in general people want more, not less, *good* medical care. It must, however, be given as expeditiously as possible without "bottle-necks" in its delivery and without referral practices which send patients prematurely from doctor to doctor taking up the patients' time unnecessarily and causing undue expense. They are willing to pay us well for our services, but not exorbitantly. The insurance principle is the greatest help yet found to aid the individual in meeting this financial obligation and let us all strive to merit the confidence the public now has in increasing numbers in the voluntary type of health insurance. If we do this, I do not believe the American people will ever prefer the government-controlled compulsory type of health care and its cost. We must also be alert to inform the public of attempts to force this kind of care upon the people by subtle and circuitous methods.

You delegates truly represent a large geographical area and I am proud to be associated with such a democratic organization wherein the ideas of any individual from the remotest corner of our state can, if they have merit, be heard here. I wish you success and satisfaction in your deliberations and may you have Divine guidance.

* * *

The President's Address was referred to the Reference Committee on Officers' Reports.

IV. PRESIDENT-ELECT'S ADDRESS

By L. W. Hull, M.D., Detroit

First of all, I want to thank you all for the privilege and the honor of being your President in the coming year. It is that, and I hope you will have no regrets at the end of the year because you have had me in that office.

I suppose the incoming president has to have some projects every year. I know we have heard so much talk about projects in the last twenty years. So I would like to emphasize some few things that we will try to carry on and perhaps do something about in the coming year.

I don't have to worry much about these things because we have had such a fine man in office for the last year, and many more behind that. This year we start off with very good prospects from a legislative standpoint. On the national level I believe we can say this is the first year in the last twenty or so that we have really had a chance.

As you know, our Public Relations and Legislative committees in the state here have been doing excellent work with our own Legislature for the last ten years. However, the threat of socialized medicine—or control of medicine by the Federal Government and by other agencies of government—is still a threat, and we must not forget that.

I think that civil defense should be one of our major projects for the coming year, not only from an area distribution standpoint but also from a local standpoint. The disasters that took place in Port Huron and Flint recently have emphasized the fact that it is not the atom bomb alone that we have to fear. Perhaps our hospitals should be organized on a local basis to take care of such accidents and such things as happened up at Flint.

I understand that there is to be a report from our confreres in Flint on the results of that disaster, and that will be very interesting not only from a scientific standpoint but also because it will give the rest of us a great deal of information as to how to take care of a local disaster.

For instance, I think every hospital staff should be organized in such a way that the doctors can be brought down there and know exactly what their jobs are when they get there. Dr. Cook was telling me last night that this is one of the things they did not have in Flint.

We should work for closer liaison with our auxiliary medical services, for instance, the nurses, our technicians, and all. They look to us as their bosses, more or less, and if we will give them a little more encouragement

than we have, I think we will be repaid a hundredfold. That includes our pharmaceutical houses, with which Bill Burns has done such very good work, and our hospitals and so on. And we should never forget that we have a very fine women's auxiliary, and they are just waiting—and eagerly—to do what they can for and with us.

It has become apparent in the last few months—perhaps due to the removal, somewhat, of the threat of socialized medicine—that the profession in Michigan has been splitting up in several groups, and that they have not been saying particularly good things about one another. Now, it is perfectly all right for us here, in our meetings, to discuss these matters, and to work for what we think is best for our group, but having made our decision here, let us all get together, let us all get behind the decision and push.

Our relationships with the AMA are much better than they were a few years ago. Of course, in Michigan we all feel as though we have been ahead of the AMA in some of our public relations. I know we have. And in the things that we have put forward, Michigan has a great number of so-called firsts.

We have a duty to do for organized medicine, and that is what I am talking about. When the AMA makes a decision, after we have worked from our viewpoint, let us get behind the AMA and work, instead of standing off in the corner some place and griping.

Now I want to thank you again, very much, for the honor of representing you here and elsewhere in the state as your President. As I said before, I hope you won't regret it.

* * *

Dr. Hull's address will be referred to the Reference Committee on Officers' Reports.

V. REPORT OF DELEGATES TO AMA

William A. Hyland, M.D. [Kent]: The AMA has held three sessions since our meeting of a year ago. I shall proceed with the interim meeting held in Denver in December, 1952, to be followed by the special session in Washington in March, 1953, and shall conclude with the recent session in New York in June of this year.

INTERIM SESSION OF THE AMERICAN MEDICAL ASSOCIATION

Denver, Colorado, December 2-4, 1952

The Interim Session had a full agenda in conjunction with an excellent scientific meeting. A registration of more than 5,000 doctors of medicine was tabulated.

Many resolutions were presented and discussed including Ethics, General Practice, Speciality Boards, Guaranteed Medical Care, Affiliated and Lay Groups and other matters. Detailed reports from the Officers, Board of Trustees and various committees were reviewed.

Specifically, the report of the special committee on Federal Medical Services, the report of the Advisory Committee on Internships and the problem of the Doctor's Draft received the most attention.

As the Federal Medical Services study and the Internship's Committee carry over into the June, 1953, session, they are included in that report.

SPECIAL SESSION OF AMA HOUSE OF DELEGATES

Washington, D. C., March 14, 1953

The unusual occurrence of a special session of the American Medical Association House of Delegates was called by the President, Dr. Louis H. Bauer, at 10:00 a.m., March 14, in the Statler Hotel.

The call was made in order to ascertain the feelings of the House regarding support by the American Medical Association to the creation of a new Secretaryship with Cabinet Rank of Health, Education and Welfare to replace what was formerly known as the Social Security Department.

It was felt by the advisory committee to the government that placing Health, Education and Welfare under one head was a step toward improving all three services of the government as also more economical in function.

President Eisenhower, Senator Taft, Social Security Director Mrs. Oveta Culp Hobby and Congressman Judd, a member of the American Medical Association, all spoke in favor of the arrangement—as better able to function, elimination of much reduplication and also avoid the serious difficulty created by many civil service employes being "frozen into" office, which Mrs. Hobby was unable to change. It was further pointed out that by this change these undesirable features could be rectified. While the American Medical Association Board of Trustees, Officers and members of the House of Delegates would much prefer a single cabinet rank of Secretary of Health by a Doctor of Medicine, it was the consensus that as long as such was impossible, the American Medical Association would go along with the proposed setup but reserved the right to withdraw if it did not function properly. The American Medical Association felt it would lend its aid to a change for the better in government functioning as long as it did not lessen our position, especially as we were promised an under secretary for medicine, by a Doctor of Medicine, in the new arrangement.

The House of Delegates unanimously approved the resolution offered by its President, Dr. Bauer.

REPORT OF JUNE 1953 AMA HOUSE OF DELEGATES

102nd Annual Session of the American Medical Association, Waldorf Hotel, New York City, June 1-4, 1953

Over 20,000 members of the profession registered, in addition to their families and others connected with medicine including Residents, Interns, Students, Nurses and Technicians, totaling in all over 45,000 people—the largest medical gathering to date in this country.

Emphasis was placed on two phases:

1. Relations of the profession to other groups.
2. Unity or harmony within the profession.

Basically, there were four main subjects on which important policy actions were taken.

1. Medical care of Veterans.
2. Ethics.
3. Relations of Medicine and Osteopathy.
4. Medical Education and Hospitals.

Medical Care of Veterans

Giving unanimous approval to a recommendation from its Reference Committee on Insurance and Medical Service, submitted as a substitute for eight different resolutions concerning the treatment of non-service-connected disabilities by the Veterans Administration, the House adopted the policy that such treatment should be discontinued except in cases involving tuberculosis or psychiatric or neurological disorders.

In taking this action, the House reaffirmed and adopted the following recommendation originally presented at the Denver Meeting last December by the Special Committee on Federal Medical Services:

"Your Committee recommends with respect to the provision of medical care and hospitalization benefits for veterans in Veterans Administration and other federal hospitals that new legislation be enacted limiting such care to the following two categories:

"(A) Veterans with peacetime or wartime service whose disabilities or diseases are service-incurred or aggravated, and

"(B) Within the limits of existing facilities to

veterans with wartime service suffering from tuberculosis or psychiatric or neurological disorders of non-service connected origin, who are unable to defray the expenses of necessary hospitalization.

"Your committee recommends that the provisions of medical care and hospitalization in Veterans Administration hospitals for the remaining groups of veterans with non-service connected disabilities be discontinued and that the responsibility for the care of such veterans revert to the individual and the community, where it rightfully belongs."

The reference committee report adopted by the House expressed complete accord with the present program of hospital and medical care for veterans with service-connected disabilities, and also included this statement:

"It is the belief of your committee that the medical profession must concern itself, not with the numbers of 'chiselers' in Veterans Administration hospitals nor with the efficacy of the Veterans Administration in the administration of enabling legislation, but rather with the broad question of whether such legislation is sound, whether the federal government should continue to engage in a gigantic medical care program in competition with private medical institutions and whether the ever-increasing cost of such a program is a proper burden to impose on the taxpayers of the country. A consideration of this problem must of course be predicated upon a concern for the health of the entire population and not just a particular segment."

That is the report of the reference committee as adopted by the House. The question now is time. The AMA, as I understand, wants to go all out and hit with an impact on this thing all at once. I think it is the opinion of many of us, especially the Michigan group and our officers and Council, that we had better go slow, taking one thing at a time.

Ethics

Eleven resolutions dealing with publicity regarding unethical conduct of physicians were brought before the House as a result of recent newspaper and magazine articles reporting statements attributed to an official spokesman of an allied medical organization. The House adopted a committee report which recommended no action on the eleven resolutions but which reaffirmed the supremacy of the AMA code of ethics and urged that the Judicial Council study suggested revisions concerning methods of billing.

"The Principles of Medical Ethics as formulated, interpreted and applied by the American Medical Association must be considered the only fundamental and controlling application of ethics for the entire profession," the reference committee report said. "Any statement relating to ethical matters by other organizations within the general profession of medicine advances views of only a particular group and is without official sanction of the entire profession as represented by the American Medical Association."

Condemning generalized statements regarding the ethics of physicians, the report went on to say:

"Your reference committee believes that the harm done to the public and to the profession by the current articles which lower the confidence patients have in their doctors cannot be objectively evaluated. This highlights the fact that, when individuals or groups without official status in the American Medical Association utter or publish ill-considered statements, the result too often is that the confidence of the public in the medical profession is placed in jeopardy.

"The reference committee believes that the members of the House of Delegates have demonstrated their devotion over the years to the principles of American democracy. This devotion includes the right of free speech. With this, the Committee agrees unqualifiedly.

"Broad generalizations, ill-advised and poorly prepared statements that often fail to convey the intended meaning are most unfortunate and are to be deplored. Destructive critical comments serve no useful purpose. Your committee has the utmost confidence that the great majority of our members are entirely capable of avoiding these pitfalls without additional advice from this committee."

The report also urged that the American Medical Association continue to inform its members and the public of its stand on matters pertaining to abuses and evils in the practice of medicine.

Relations of Medicine and Osteopathy

Most controversial issue brought before the House at the New York meeting proved to be the question of immediate or deferred action on the report of the Committee for the Study of Relations between Osteopathy and Medicine. The House, after two hours of vigorous, spirited debate, adopted the majority report of the Reference Committee on Miscellaneous Business, thereby postponing action until the June, 1954, meeting and allowing further study by the delegates and the state associations.

The recommendations of the Committee for the Study of Relations between Osteopathy and Medicine were as follows:

"1. That the House of Delegates declare that so little of the original concept of osteopathy remains that it dose not classify medicine as currently taught in schools of osteopathy as the teaching of 'cultist' healing.

"2. That the House of Delegates state that pursuant to the objectives and responsibilities of the American Medical Association which are to improve the health and medical care of the American people, it is the policy of the Association to encourage improvement in the undergraduate and postgraduate education of doctors of osteopathy.

"3. That the House of Delegates declare that the relationship of doctors of medicine to doctors of osteopathy is a matter for determination by the state medical associations of the several states and that the state associations be requested to accept this responsibility.

"4. That the Committee for the Study of Relations between Osteopathy and Medicine or a similar committee be established as a continuing body."

A minority report of the reference committee urged approval and adoption of the above recommendations for immediate action. The majority report, which ultimately was adopted, included the following recommendations by the Board of Trustees:

"Because of the length of the report and the controversial nature of the subject, the Board feels that the House should have adequate time for its study and that the state associations should have opportunity to express their opinions.

"Therefore, it is recommended that the Committee be continued but that action on the report be deferred until the June, 1954, session. It is suggested that at that time the House be prepared to answer the following questions:

"1. Should modern osteopathy be classified as 'cultist' healing?"

"2. Since the objectives of the American Medical Association include improvement in undergraduate and postgraduate education, should doctors of medicine teach in osteopathic schools?"

"3. Should the relationship of doctors of medicine to doctors of osteopathy be a matter for determination by the several state associations?"

Medical Education and Hospitals

Five resolutions came before the House with regard to the Essentials of an Approved Internship, which were adopted at the December, 1952, meeting in Denver. The Reference Committee on Medical Education and Hospitals recommended a substitute resolution which was adopted by the House after considerable discussion. The action abolishes the rule whereby approval may be withdrawn from an internship program which for two consecutive years fails to obtain at least two-thirds of its slated complement of interns. The resolution also calls for further study of the Essentials by a committee appointed by the Speaker of the House, at least half of whom are doctors in private practice not connected with medical schools or affiliated hospitals.

Miscellaneous

Among the many other actions taken, the House reaffirmed its endorsement of the principles embodied in Senate Joint Resolution No. 1 concerning international treaties or agreements which interfere with domestic laws or rights, and it approved a resolution deploring a derogatory article about the American Medical Association which appeared recently in the *Home Life Magazine*. The latter resolution was referred to the Board of Trustees for implementation.

Highlights of the opening day session of the House were addresses by Dr. Louis H. Bauer, who delivered his term-end report as retiring president; Dr. Edward J. McCormick, who spoke on that day as president-elect, and Mrs. Oveta Culp Hobby, United States Secretary of Health, Education and Welfare, and selection of the winner of the 1953 Distinguished Service Award.

Dr. Bauer, referring to charges of unethical practices among some doctors, declared that all members of the medical profession "should not be tarred with the same stick."

Dr. McCormick outlined a nine-point program for further improvement in the nation's medical care and expressed the hope that "their further development will solve many of medicine's problems and eliminate much of the criticism to which we are subjected.

Mrs. Hobby told the delegates that the present administration in Washington is looking with confidence to the nation's physicians for leadership in meeting the challenge of modern medical care problems.

The 1953 Distinguished Service Award was voted to Dr. Alfred Blalock of Baltimore for his outstanding work in vascular surgery and his part in the development of the so-called "blue baby" operation. Dr. Blalock, chief surgeon at Johns Hopkins Hospital and professor of surgery at Johns Hopkins University School of Medicine, received the award during ceremonies preceding the presidential inauguration Tuesday night, June 2.

The House unanimously elected Dr. Walter Martin of Virginia as president-elect, Dr. Carl H. Gellenthien of Valmora, New Mexico, vice president, succeeding Dr. Leo F. Schiff of Plattsburg, New York.

Re-elected to office were: Dr. George F. Lull, Chicago, secretary and general manager; Dr. J. J. Moore, Chicago, treasurer; Dr. James R. Reuling, Bayside, New York, speaker of the House of Delegates; Dr. Vincent Askey, Los Angeles, vice speaker of the House; Dr. Edwin S. Hamilton, Kankakee, Illinois, and Dr. Gunnar Gunderson, La Crosse, Wisconsin, as members of the Board of Trustees.

The House elected Dr. Julian P. Price of Florence, South Carolina, to fill Dr. Martin's unexpired term on the Board of Trustees.

As Chairman of the Michigan Delegation I wish to express my deep appreciation for the wise counsel and advice given by all our delegates and alternates as also the officers and members of the Council and the Legal Counsel, in the deliberation in our quarters of the various matters that came before the House. The crystalization of the many expressions enabled us to enter the final sessions with a clear picture of what our decisions were to be thus adding Michigan's bit to the progress of American medicine.

Respectfully submitted,

W. D. Barrett, M.D.
J. S. DeTar, M.D.
W. H. Huron, M.D.
R. A. Johnson, M.D.
R. L. Novy, M.D.
W. A. Hyland, M.D.

Addendum

The Michigan Delegates, Alternates, Officers and others had breakfast together each morning at which time the various resolutions were discussed, plans for the day's committee meetings and sessions were gone over, those more interested in certain resolutions were to attend the reference committee hearings to which these resolutions had been assigned. The following morning each reported back to the group the opinions and whatever else was pertinent that he had gained or concluded. In addition other conferences of the Michigan group were held both with ourselves and other state delegations. Nearly all of the delegates were on standing or special committees.

The Michigan Delegation is gradually leaving an impact on the House which the Board of Trustees are cognizant of, consequently they have frequently called various members in for discussions and asked them to take various influential positions.

We urge all of you to keep in contact at all times with your national as well as state legislators. Both of these groups have asked us personally to keep in touch with them and channel all helpful and pertinent information to them.

* * *

The Speaker: We shall refer this report to the Reference Committee on Officers' Reports.

VI. REPORTS OF THE COUNCIL

The Supplemental Report of The Council was presented by Dr. William Bromme, chairman.

SUPPLEMENTAL REPORT OF THE COUNCIL

The Annual Report of The Council is printed in the Handbook for Delegates on page 53. We wish to present the following Supplemental Report of The Council, as of September 20, 1953.

1. *Membership.*—As of September 1, 1953, the membership of the Michigan State Medical Society totaled 5,414, including 613 Special Members who are relieved from paying dues and assessments.

2. *Finances.*—The Constitution of the Michigan State Medical Society places responsibility on The Council for administration of the funds of the Society, and charges the Treasurer with safekeeping of the Society's invested funds.

Following the provision of the MSMS Constitution, The Council has caused an "annual audit to be made of the funds of the Society by a certified public accountant." The complete report of Madan & Bailey for the year 1952 was published in the March, 1953, Number of The Journal of the Michigan State Medical Society, beginning at page 316. On pages 320-321 of the same Journal is printed the MSMS budgets for the year 1953. As in the past, the audit of the accounts is and always has been available for inspection by any member of the Michigan State Medical Society who may call at the Executive Offices, 606 Townsend Street, in Lansing.

The report of our staff accountant for the first eight months of this year (from January 1 to September 1, 1953) of income and expenses is as follows:

FINANCIAL REPORT FOR PERIOD ENDING AUGUST 31, 1953

ACCOUNT	On Hand 1-1-53	Income to 9-1-53	Expenses to 9-1-53	Balance on Hand 9-1-53
General Fund	$ 65,256.15	$ 97,599.66	$ 70,640.92	$ 93,214.89
Annual Session			4,796.77	20,051.16
Michigan Clinical Institute	0	11,850.00	11,383.74	466.26
THE JOURNAL	0	41,500.10	33,989.94	7,510.16
Public Education	30,482.34	96,541.00	47,044.20	79,979.14
Public Education Reserve	30,000.00	0	0	30,000.00
Rheumatic Fever Control	15,863.57	12,444.16	16,362.22	11,945.51
Surplus from Dues	14,369.09	7,225.08	0	21,594.17
Building Fund	10,643.82	9,633.60	4,048.25	16,229.17
Beaumont Memorial	26,251.85	4,101.32	38,848.90	8,495.73CR
TOTALS	$193,866.82	$305,742.85	$227,114.94	$272,494.73

More detailed financial reports, including the public relations accounts from January 1, to September 1, 1953, have been presented today (in mimeographed form) to all members of the House of Delegates. Also included is report from Treasurer Wm. A. Hyland, M.D., presented to The Council in July, 1953.

3. *Michigan Medical Service.*—An up-to-date report on this Corporation, including its finances, will be presented to you at the meeting of Michigan Medical Service Membership tomorrow, September 22, at 2:00 p.m. in the Ballroom, Pantlind Hotel, Grand Rapids. All MSMS Delegates are Members of the Michigan Medical Service Corporation and are expected to attend this important annual meeting.

4. *Beaumont Memorial.*—Otto O. Beck, M.D., Birmingham, Chairman of the Beaumont Memorial Working Committee, presented to The Council yesterday the following financial status of contributions to the Beaumont Memorial:

Donated to September 1, 1953	$30,363.17
Expended to September 1, 1953	88,848.90
Advanced by MSMS	8,485.73

The Council feels that the Beaumont Memorial is one of the finest public relations projects ever undertaken by the Michigan medical profession. The development of this memorial to Dr. William Beaumont at the site where his great and original contribution to Medicine was accomplished will be a perpetual reminder to all people of the solid contributions made by Michigan doctors of medicine in their behalf. The Council invites continued contributions and hopes that many scores of MSMS members will be on hand at Mackinac Island for the public Dedication of the Beaumont Memorial on Saturday, July 17, 1954.

5. *Michigan's Foremost Family Physician for 1953.*—Selection of one of our Michigan general practitioners as nominee for the AMA Gold Medal Award is now the privilege of the House of Delegates. According to the satisfactory procedure worked out two years ago, the field of nominees has been narrowed to three from which the House of Delegates will elect one: the three names are: Fred J. Drolett, M.D., Lansing; Joseph H. Sherk, M.D., Midland; Wm. J. Stapleton, M.D., Detroit.

6. *List of Non-members.*—Pursuant to the House of Delegates instruction of 1948, The Council (through Secretary L. Fernald Foster, M.D.) today submits a list of former members whose 1953 MSMS dues were not paid as of September 1, 1953. To insure accuracy, this list recently was submitted to and certified as correct by component county and district medical society secretaries.

7. *Basic Science Study Committee.*—The report of this Committee is to be presented to the House of Delegates on September 21. The Council feels that this Study Committee is to be highly congratulated on its industry and on important information on a controversial subject which is revealed in its report.

8. *The Council received an open letter from Ralph H. Pino, M.D.,* proposing certain valuable suggestions relative to reorganization of the American Medical Association which would provide that organization, as the representative of the Medical Profession, with adequate leadership in the problems of the economic and distribution factors of health care. The Council referred this communication to the AMA Delegates urging them to promote the constructive ideas contained therein and authorized them to draft an appropriate resolution to this end for the consideration of the House of Delegates of the AMA.

9. *Cancer Co-ordinating Committee.*—Beginning with September, 1953, a Cancer Co-ordinating Committee has been recommended for the State of Michigan, to include four doctors of medicine representing the Michigan State Medical Society; the Michigan Health Commissioner; one M.D. representing the Michigan Health Officers Association; two M.D.'s and one layman from the Michigan Division of the American Cancer Society; two M.D.'s and one layman representing the Southeastern Michigan Division of the American Cancer Society; and one representative from the Michigan State Dental Society. The Michigan State Medical Society has appointed its representatives and looks forward to increasing co-operative activity and progressive work through the new Michigan Cancer Co-ordinating Committee.

10. *"Golden Goose" Breakfast of September 24.*—The chiefs of staffs of Michigan's 169 hospitals, as well as all members of the Michigan State Medical Society, have been invited to attend this complimentary breakfast scheduled for Thursday, September 24, at 7:00 a.m. in the Ballroom of the Pantlind Hotel. It is hoped that every member of the House of Delegates will attend this meeting to hear presented a problem which affects every Michigan practitioner, his patients, and his hospital relations.

11. *Organization.*—Your Chairman again wishes to pay tribute to the many men of medicine who make up your committees. It is their activity at your mandate which has made this Michigan State Medical Society the important agency it is in the improvement of the health of the people of this Commonwealth. The devotion to this call goes somewhat beyond the routine of the practice of medicine, and the time taken by Committee members from the office or sacrificed from the quieter moments with the family amounts to a multitude of precious hours. Your chairman feels we must all recognize that our delegates, our committee members, and our councilors are contributing a great share of themselves in working in our behalf. Your Council Chairman takes this occasion to express his personal thanks to them for what they are doing for all of us. The laymen who make up the personnel of our headquarters at Lansing have become something more than people working at a job; they likewise feel the import of the medically sponsored projects of the Michigan State Medical Society, and we are indeed fortunate to have them in our organization as part of us.

Recommendations

We respectfully invite to your attention the seven recommendations in the original Annual Report of The Council, printed in the Handbook on page 75. They read as follows:

1. That continued active and tangible co-operation with the American Medical Association and support of the American Medical Education Foundation be urged upon every MSMS member who is seriously invited to maintain and strengthen his support of the American Medical Association. Strength comes from unity and work, joined hand in hand. It flows from the roots to the trunk and thence to the branches.

2. That contributions to the Beaumont Memorial Restoration Fund—by *every individual member* of the Michigan State Medical Society—be recommended by the House of Delegates so that the Beaumont Memorial may be presented as the gift of the Michigan medical

profession to the Mackinac Island State Park Commission at the time of the dedication July 17, 1954, in consideration of a pledge by the Mackinac Island State Park Commission to maintain the shrine in perpetuity.

The shrine to Dr. Beaumont on Mackinac Island will be an eternal memorial to the swiftly moving science of medicine and to the generosity of Michigan's practitioners of medicine. It represents the best type of public relations.

3. That MSMS representatives be instructed to continue their yearly visit to Washington, D. C., on the occasion of Michigan Day sponsored by the U. S. Chamber of Commerce.

4. That the MSMS Liaison Committee with the Basic Science Board and the Committee on Veterans Administration Hospital Plan, which Committees have been inactive or in the latter case, assumed by the Liaison Committee with Michigan Veterans Organizations, be discontinued; (as these are Special Committees no amendments to By-Laws will be necessary).

5. That all component county societies give early study to their constitutions and by-laws, especially in the chapter referring to memberships to the end that all county societies have memberships analogous to those of the Michigan State Medical Society as recommended by the Special Committee on Memberships (reporting to the 1953 House of Delegates) and in accordance with the MSMS By-Laws, Chapter 1, Section 1:

"The Charter of each component county society shall require that each of the provisions of the Constitution and By-Laws of the Michigan State Medical Society, together with each amendment to either thereof, hereafter adopted, insofar as the same is applicable, shall be an integral part of the constitution and by-laws of the component county society to which a charter is issued and shall in no way be inconsistent with the Constitution and By-Laws of the Michigan State Medical Society."

6. That all doctors of medicine, members of the Michigan State Medical Society, be alert to statements uttered or published in speeches, in editorials or otherwise which are unfavorable to medicine and that doctors of medicine, guided by their state and county societies, seek the person or persons responsible and attempt to impart truthful pertinent and factual information leading to possible public retraction of the unfavorable or untruthful statement(s).

7. In view of the findings in the first report of the Advisory Committee to Michigan Hospital Service, The Council is impressed by the dangers inherent in the improper use of the services of Blue Cross and Blue Shield. We urge the House of Delegates to permit the continued activity of the Committee and its studies in this field. The Council further proposes that county societies and hospital staffs be urged to utilize the information released by The Council on these continuing studies, to the end that all parties concerned in these apparent improper uses may be restrained from continuing a practice that threatens the very existence of prepaid medical services.

Respectfully submitted,
WILLIAM BROMME, M.D., *Chairman*
H. B. ZEMMER, M.D., *Vice Chairman*
ARCH WALLS, M.D.
R. S. BREAKEY, M.D.
G. W. SLAGLE, M.D.
RALPH W. SHOOK, M.D.
J. D. MILLER, M.D.
H. H. HISCOCK, M.D.
L. C. HARVIE, M.D.
G. B. SALTONSTALL, M.D.
F. H. DRUMMOND, M.D.
C. A. PAUKSTIS, M.D.
A. H. MILLER, M.D.
W. S. JONES, M.D.
B. M. HARRIS, M.D.
D. B. WILEY, M.D.
W. D. BARRETT, M.D.
W. B. HARM, M.D.
R. H. BAKER, M.D., *Speaker*
J. E. LIVESAY, M.D., *Vice Speaker*
R. J. HUBBELL, M.D., *President*
L. W. HULL, M.D., *President Elect*
L. FERNALD FOSTER, M.D., *Secretary*
W. A. HYLAND, M.D., *Treasurer*
OTTO O. BECK, M.D., *Immediate Past President*

* * *

THE SPEAKER: Dr. Bromme's report will be referred to the Reference Committee on Reports of the Council.

VII. REPORT OF WOMAN'S AUXILIARY TO MSMS

The next item of business is a brief of the Annual Report of the Woman's Auxiliary by the President, Mrs. William Mackersie, of Detroit.

REPORT OF WOMAN'S AUXILIARY TO MSMS

It is a privilege, as President of the Woman's Auxiliary to the MSMS, to bring greetings from our 2200 members.

Chaucer said: "God, when he made the first woman made her not of the head of Adam, for she should not climb to great lordship; God made not woman of the foot of Adam, for she should not be holden too low; but God made woman of the rib of Adam, for woman should be fellow to man." As an Auxiliary, that is just what we desire—to be a helpmate, a companion along the road. Your problems are our problems; when you succeed, we rejoice with you. The activities and achievements of the Woman's Auxiliary this past year attest to these facts. It is with pleasurable pride that a record of these accomplishments is brought to you today.

In recent years changing circumstances have caused the busy physician to realize his civic responsibility beyond his Hippocratic Oath. He lives the life of his community and the people he serves, and with the honor of sharing his life comes to his wife the privilege of membership in the Woman's Auxiliary. By joining the county auxiliary she can become associated with an organization active and effective both locally and nationally.

Organization.—The organizational setup of the Auxiliary was patterned after the parent society. In the nine districts we have 44 component auxiliaries, with a membership of 2,249. Through the praiseworthy efforts of Mrs. George Cook, our Members-at-large chairman, one of these auxiliaries, Ionia-Montcalm, is new this year and we have nineteen members-at-large in unorganized counties. The disparity between the Michigan membership in the American Medical Association, 5,110, and the 2,249 membership in the Auxiliary is disturbing. We don't like to think that the wives of half of Michigan's doctors are not enough interested in what happens to their husbands' profession to be willing to affiliate themselves with the only organization outside the doctors themselves, whose sole objective is the best interests of that profession. When you return to your respective counties won't you tell these women how much we would like to have them join us; to help us close the ranks solidly behind American Medicine? Many of you have given generously of your time and wisdom as you have served on advisory councils to woman's auxiliaries. For this we thank you. The Auxiliary needs the full recognition and support of the medical profession before it can realize its own great potentiality.

Program.—Our programs throughout the state vary according to the size of the group. In some very small ones, there have been no set programs, just discussion of auxiliary activities and timely, pertinent legislation, with work, such as making hospital supplies, being done at each meeting. We feel that these meetings are of inestimable value, for women coming together regularly can,

on a basis of friendship and common interests and problems, work effectively for the advancement of Medicine and public health. Programs have been both educational and entertaining; pertaining to medicine and public health or, in some instances, quite unrelated to them but of interest to women. This year Mrs. John Walch of Escanaba, one of the Auxiliary's past presidents, has served on the program committee as a consultant on Gerontology. She has given most excellent talks at several meetings sponsored by auxiliaries and the interest in this vitally important field of medicine is evident.

Public Relations.—In the area of Public Relations the Auxiliary has been able to demonstrate most forcibly her desire and ability to walk by the side of the doctors. Our goal has been to maintain and develop the prestige and esteem of the medical profession in the eyes of the public by assuming community leadership and service in the field of health and in community activities.

Every doctor's wife has contacts with other organizations which can, and should, provide valuable avenues for furthering good public relations. Not only can the auxiliary interpret the medical profession to the community, but its members can bring back to the parent society valuable information on the needs, desires and problems. They can record, as it were, the temperature and pulse rate. Hoosier Kin Hubbard, with his homespun humor, once remarked: "No wonder Solomon was so wise with 8 to 900 wives combin' the neighborhood." Maybe he had something there!

One of our first excursions into the Public Relations field took place just three days after assuming office, when the President and the First Vice President appeared on a 30-minute TV show, the Court of Health, produced by the Michigan Health Council. This TV interview brought to the listening audience some of the aims and activities of the auxiliary and, of course, the medical profession.

All counties did yeoman service in the election campaign, throwing their weight behind the Formula For Freedom program of the Michigan State Medical Society. Getting out the vote; assisting in the distribution of the 40,000 Voters Guides purchased by the MSMS, and serving as challengers at the polls were some of the ways assistance was given.

To most of you the story of the Battle of Bay City is a familiar one. The part played in it by the Auxiliary may not be as well known. The Auxiliary secured long lists of names of interested persons; distributed to the doctors' offices 27,000 letters for mailing; distributed 143,000 pieces of literature; manned four telephones for eight hours, daily, for a week (5,000 phone calls); arranged to keep two persons near every polling booth from 7:00 A.M. to 8:00 P.M. on election day to hand out literature; furnished cars and drivers for transportation and, above all, enlisted countless lay friends in all these activities. The chairman of the Hospital Committee says: "There is no way to measure the value of the work done by the Medical Auxiliary during the campaign to save our General Hospital from osteopathic invasion."

Throughout the year our membership has been alerted by our Chairman on Legislation about bills brought to our attention by the American Medical Association and our State Society. Appropriate action was taken as suggested by them.

This year has shown a marked increase in the cooperation with lay groups of related interests, such as the wives of dentists and lawyers and members of the nursing profession. The wives of interns and senior medical students have been the guests of auxiliaries and Ingham County Auxiliary entertained the wives of the legislators at an excellently appointed social affair.

Many of the counties held a Public Relations Day at which time representatives from Clubs, Churches and other organizations were their guests to hear speakers on such pertinent topics as Fluoridation of Water, History of Medicine, Gerontology, Civil Defense and Nurse Recruitment. Social hours following these meetings made it possible for the doctors' wives to become better acquainted with members of the community who also have its problems at heart.

Exhibits have been provided at the County Fairs, Rural Health Conference and the State Federation of Women's Clubs. We assisted in staffing the MSMS booth at the State Fair in Detroit.

Several auxiliaries have sponsored the showing of the MSMS films—"Lucky Junior," "To Save Your Life," and "To Your Health."

At the Midyear Board meeting Mrs. Elizabeth Peck, President of the Medical Assistants Society was on our program. A resolution was adopted urging the auxiliaries to publicize their training program and to co-operate, whenever possible, with the Medical Assistants. The Auxiliary rendered such assistance in the formation of the new chapter in the Upper Peninsula. At the same meeting it was voted to render help, when requested, to the Michigan Heart Association in presenting the Cardiac Housewife program. This also has been done. We are continuing to place copies of Medical Associates brochures throughout the state.

Support of various voluntary medical programs is another way we have favorably cemented community relationships. A quotation from the report of our chairman, Mrs. Shadley, is illuminating: "In twenty-one counties members assist with the Red Cross Blood Bank and other phases of Red Cross work; twenty-four assist the local hospital either in fund-raising or as assistants; others report activity in the following fields—March of Dimes thirteen counties, Crippled Children's Projects fifteen, Heart Association five, Cancer twenty, Sightsaving in Schools six, Health Booths at Fair four, Work with Health Council or Welfare groups seven, Deaf Children two, Mentally Retarded three, Overseas Packages two, Boy or Girl Scouts twenty-two, Blue Cross-Blue Shield five, Medical and Surgical Relief eight counties. One Auxiliary sponsors an annual Christmas party for a school for retarded girls and this year gave $100 to the Christmas Adventure in World Understanding for Foreign Students held at East Lansing."

As part of their community responsibility auxiliaries have been active in the Civil Defense program. Some have been working as sky watchers; others teaching home nursing and first aid classes and placing window displays. One auxiliary helped the Defense Department to reactivate six "pilot stations," which work necessitated over 2,000 phone calls to lay persons.

Doctors don't need to be told of the acute shortage of nursing personnel. With few exceptions, the county auxiliaries are actively working on recruitment. Michigan has now over 150 Future Nurses Clubs and a rally in Flint brought together 600 girls. Scholarship and loan funds total over $8,000. One auxiliary ran a newspaper advertising campaign and also supplied 32,000 bill stuffers on nursing. A heartening trend is the co-operation with other groups like the Michigan League for Nursing, Council on Community Nursing and with Hospital Auxiliaries in the field of recruitment.

This year we have taken a step into the field of International Public Relations. In May a request came from the Ontario Medical Association for me to be the speaker at a meeting during their annual convention in Toronto, at which time there was to be discussion relative to the formation of an auxiliary. That evening an auxiliary to the Ontario Medical Association became an actuality. It has been most stimulating and thrilling to assist them in their organizational plans.

As an auxiliary we have contributed to the American Medical Education Foundation and although only about half of the component auxiliaries have reported contributions many of them are placing it in their budget for the coming year.

Health Education.—One of our foremost projects in the field of Health Education is cosponsoring with the

Michigan Tuberculosis Association a radio speech contest on the subject of tuberculosis. This year thirty-eight counties were represented with 2,376 students participating. School audiences totaled 15,106 and fifteen radio stations presented local programs.

At some of our county meetings, and at the Midyear Board meeting, information was brought to our members about the use of gamma globulin in polio, so that the doctors' wives might carry back to their community the facts about its restricted use, thus easing the pressure being placed on the doctors by anxious parents. The auxiliary assisted with "Operation Lollipop" in the upper part of the state.

A task designated to us by the American Medical Association in 1931 was the promotion of *Today's Health* magazine. It has been given to schools, libraries, community houses, Y's, Scout Councils, Public Health nurses and, in one county, to all dentists. We are not magazine salesmen, but the AMA has assigned this as one of our fields of service in Health Education. Have you thought of the Public Relations value of *Today's Health* in your waiting room? It has been estimated that in each doctor's office 103 persons per month read *Today's Health* when it is available. The doctor's cost for educating all these 103 persons is 12½ cents per month. Many of you subscribe for magazines for your waiting room which are much more expensive. Haven't you had to refute much of the medical information your patients read in these magazines, as well as duck the brickbats thrown at your profession by its paid writers? Wouldn't it be a more sound investment to place at the disposal of your patients a magazine containing authentic information upon which they can rely? If you would also advise your secretary to make a notation when she sends in your subscription asking to have it credited to your Woman's Auxiliary it would not only boost our record with National but also the morale of our *Today's Health* chairman.

Perhaps it is because women at heart are all interested in good housekeeping but the officers of the auxiliary are positively thrilled to have a home for our archives. Too long these records have been reposing in someone's attic. Now, thanks to the generosity of the MSMS, they have a file of their own in the headquarters at 606 Townsend Street, Lansing. For this and many other favors such as publishing our *Auxiliary News,* mimeographing and financial assistance with our convention, we are sincerely grateful.

It has been a pleasure to work with your President, Dr. Hubbell, the members of the Council, the Advisory Council and the Public Relations staff and our appreciation for the favors extended to us is most genuine.

Be assured that your Auxiliary will remain at your side, ready to be a partner in any enterprise which will enhance the prestige and integrity of the medical profession and preserve the freedoms which have made America great.

(Mrs. Wm.) Kathleen Mackersie, *President*

* * *

Mrs. Mackersie's report will be referred to the Reference Committee on Officers' Reports.

VIII. SELECTION OF MICHIGAN'S FOREMOST FAMILY PHYSICIAN

For the selection of Michigan's "Foremost Family Physician," I have proposed names here. Mr. Secretary, do you have information on these men?

They are: Fred J. Drolett, M.D., of Lansing; Joseph H. Sherk, M.D., of Midland; and William J. Stapleton, Jr., M.D., of Detroit.

(Dr. J. E. Livesay, Vice Speaker, assumed the chair.)

J. E. Livesay, M.D.: This award calls for your marking your ballots for one name. Will the tellers collect the ballots?

Dr. John R. Heidenreich: The vote was as follows. (1) Dr. Stapleton, (2) Dr. Sherk, (3) Dr. Drolett. Dr. Stapleton is therefore elected.

IX. RESOLUTIONS AND MOTIONS

IX—a. CLINE (AMA) REPORT

(Dr. Baker resumed the chair.)

The Speaker: The next item of business is resolutions.

John R. Rodger, M.D. (Northern Michigan): May I present a resolution relative to the Cline Committee report?

The Speaker: That will be referred to the Reference Committee on Resolutions.

IX—b. MSMAS

Orlen J. Johnson, M.D. (Bay): I have a resolution relative to the Michigan State Medical Assistants Society.

WHEREAS, The Michigan State Medical Assistants Society, organized in 1950, has grown modestly; and

WHEREAS, This organization has proved to be of valuable assistance to medicine, professionally and public relations-wise; and

WHEREAS, There are requests for information about the Medical Assistants Society from organizations outside the state; therefore be it

RESOLVED, That the Michigan State Medical Society, through its Public Relations Committee, aid in preparing a pamphlet to outline the history, objectives and other pertinent information about the Michigan State Medical Assistants Society; and be it further

RESOLVED, That the Michigan State Medical Society endorse the establishment of courses for education of medical assistants in the colleges throughout the State of Michigan.

The Speaker: That resolution will be referred to the Resolutions Committee.

IX—c. DUES FOR YOUNGER MEMBERS

Kenneth B. Babcock, M.D. (Wayne): I have a resolution to introduce.

"WHEREAS, Medical societies are dependent on the younger members for their future development and for the effectiveness of their present programs; and

WHEREAS, It is the wish of the medical profession that every effort be made for a physician to become a member of his local medical society as soon as he enters practice; and

WHEREAS, It is often difficult for a physician to pay his dues during the first year of his practice; and

WHEREAS, Conversely, this is when the physician most needs guidance and advice of his medical society; and

WHEREAS, Reduction of county dues is no longer an effective means of meeting the problem, since county dues constitute only 25 per cent or less of the total dues; therefore be it

RESOLVED, That to assist the younger physicians and to assure the continued growth of the Medical Society, the House of Delegates of the Michigan State Medical Society reduce the annual dues for younger members 75 per cent the first year of practice and 50 per cent the second year; and be it further

RESOLVED, That the Michigan Delegates be instructed to introduce a resolution to the American Medical Association House of Delegates requesting reduction of A.M.A. dues for younger physicians on a similar proportionate basis.

The Speaker: This resolution will be referred to the Reference Committee on Constitution and by-laws.

IX—d. COURSES IN MEDICAL ETHICS

KARL L. SWIFT, M.D. (Wayne):

WHEREAS, Neither the University of Michigan Medical School nor Wayne University College of Medicine offers a course in medical ethics; and

WHEREAS, A code of ethics based upon principles of morality is a fundamental requirement of life in a free society; and

WHEREAS, The complicated relationships involved in modern medical practice have made it increasingly difficult for the doctor of medicine to solve his ethical problems without a thorough knowledge of ethical principles as applied to the practice of medicine; now therefore be it

RESOLVED, That the Michigan State Medical Society recommends to the deans of the respective medical schools in the State of Michigan that a course in medical ethics be made a required subject in the curriculum for candidates for the degree of doctor of medicine.

THE SPEAKER: That resolution will be referred to the Reference Committee on Legislation and Public Relations.

IX—e. AMERICAN COLLEGE OF SURGEONS

EARLE C. LONG, M.D. (Wayne):

WHEREAS, The American College of Surgeons has deemed it proper to notify hospital administrative authorities in the Wayne County area of their backing of a new society being formed in that area; and

WHEREAS, The Michigan State Medical Society is in sympathy with the objectives of this organization, although its purpose is local; and

WHEREAS, The American College of Surgeons has determined nine points that are essential for this Society to obtain its objectives; and

WHEREAS, Point No. VI in the plan, which states

> **"Notification of the Internal Revenue Agent in Charge of income investigations in the district of the aim and function of the above organization. If the State has a law prohibiting fee-splitting, it would be ascertained whether this Agent is disallowing split fees as a business expense deduction, in keeping with Internal Revenue Bureau policy stating that such deductions are against public policy in states having anti-fee-splitting laws. Irrespective of the law or the Agent's enforcement of policy, the organization should adopt the position—and so inform the Agent—that by its action, the business deduction of split fees no longer can be regarded as a normal, usual and customary expense of doing business in the community, and therefore is disallowable according to Internal Revenue Bureau policy"**

would involve the members of the Michigan State Medical Society in their relations with the Federal Department of Internal Revenue, because of the demands that would be made by this Society on the agents of this federal bureau would affect not only the Wayne County area but the entire federal district; and

WHEREAS, The Michigan State Medical Society was not consulted or represented in the formation of these plans; therefore be it

RESOLVED, That the Michigan State Medical Society resents the action of the American College of Surgeons in such a manner, and believes the American College of Surgeons has no right to order a federal bureau to be bound by its dictates in its relations with the practices of the members of the Michigan State Medical Society; and be it further

RESOLVED, That the Michigan State Medical Society notify the American Medical Association that they are willing and anxious to abide by the rulings of their parent organization, but believe that organization should protect their members from subjugation and threats of federal persecution by outside special organizations; and be it further

RESOLVED, That copies of this resolution be sent to the Board of Trustees of the American Medical Association, the Board of Regents of the American College of Surgeons, and the Detroit Surgical Society.

THE SPEAKER: This resolution will be referred to the Reference Committee on Resolutions.

IX—f. PUBLIC RELATIONS FUNDS

EDWIN H. FENTON, M.D. (Wayne):

WHEREAS, The urgency for the Michigan State Medical Society special dues of $20 yearly for public relations has lessened; and

WHEREAS, The real core of good public relations is individual physician-patient relationship; and

WHEREAS, Improvement in service to the public can frequently be performed better by county societies than the state organization; therefore be it

RESOLVED, That any county society wishing to carry on local public relations in the way of a service program or other acceptable means may request of the Michigan State Medical Society fund, allocated for such purposes, in an amount not to exceed one-half of the amount paid in by such counties for this purpose. The decision on the granting of each request shall rest with The Council of the Michigan State Medical Society.

THE SPEAKER: That resolution will be referred to the Reference Committee on Resolutions.

IX—g. VETERANS CARE

JOHN M. MARKLEY, M.D. (Oakland):

WHEREAS, The American Medical Association, by recent action of its House of Delegates, has recommended that the provision of medical care and hospitalization by the Veterans Administration be limited only to (1) veterans with diseases and disabilities which are service-incurred or aggravated, and (2) temporarily to wartime veterans suffering from tuberculosis or neuropsychiatric disorders of non-service-connected origin who are unable to pay the expense of necessary hospitalization; and

WHEREAS, The Michigan State Medical Society is of the opinion that the ultimate objective of the American Medical Association is to develop better utilization of Veterans Administration hospital facilities, and to return those facilities to the use for which they were originally intended, namely, the care of the veteran suffering from disability or disease incurred during his period of service in the nation's armed forces; and

WHEREAS, The Michigan State Medical Society is in full accord with this ultimate objective, and with the general principle that medical and hospital care for any citizen, other than veterans whose physical or mental state has been impaired by virtue of military service, rightfully is the responsibility of the individual and of his state or community; and

WHEREAS, The rapid growth of the veteran population (now 20 million, and increasing by 1 million each year) and lax policies with regard to Veterans Administration hospital care could well lead the nation directly into full-scale government medicine; and

WHEREAS, The Michigan State Medical Society feels that any immediate campaign toward gaining this objective should be limited in its concept to the initial objective of eliminating abuses and removing from Veterans Administration hospitals those patients with non-service-connected disorders who are able to defray their own hospital and medical expenses (either personally or through local or state agencies), bringing this about by such means as a re-analysis of present laws and regulations; now therefore be it

RESOLVED, That the Michigan State Medical Society strongly urge the American Medical Association, in implementing a campaign better to define the

scope of the Veterans Administration hospital program, to make no concerted attempt at this time to alter the intent of the law as passed by Congress, but rather to extend the efforts of the medical profession toward the initial objective of eliminating abuses and the removing from Veterans Administration hospitals of those patients with non-service-connected disabilities who are able to defray, either personally or through local or state governments, their own hospital and medical expenses.

THE SPEAKER: This resolution will be referred to the Reference Committee on Legislation and Public Relations.

IX—h. ASSOCIATE MEMBERSHIP FOR V.A. DOCTORS

HARVEY C. HANSEN, M.D. (Calhoun):

WHEREAS, Doctors of medicine now employed by Veterans Administration are not classified as Military Members, and may not be Associate Members of the Michigan State Medical Society or the component county societies; and

WHEREAS, Many physicians employed by the Veterans Administration institutions are not licensed to practice in the State of Michigan, and thereby are not eligible for active membership in the Michigan State Medical Society; now therefore be it

RESOLVED, That the Calhoun County Medical Society proposes that Chapter 5, Section 3, Paragraph E of the By-Laws of the Michigan State Medical Society be amended to permit Doctors of Medicine employed by the Veterans Administration to become Associate Members of the component county medical societies and the Michigan State Medical Society.

THE SPEAKER: This resolution will be referred to the Reference Committee on Constitution and By-Laws.

IX—i. WATER RESOURCES

ERNEST W. BAUER, M.D. (Oakland):

WHEREAS, The Water Resources Commission, at the urging of Representative William Broomfield, has agreed to conduct a survey of water needs and pollution of state water sources; and

WHEREAS, This action will lead to a comprehensive knowledge of the water and drainage needs for many years to come; and

WHEREAS, This action is in the interest of the public health and welfare; now therefore be it

RESOLVED, That the Michigan State Medical Society heartily endorses this action and offers its support for this purpose.

THE SPEAKER: This resolution will be referred to the Reference Committee on Hygiene and Public Health.

IX—j. FURTHER STUDY OF HEALTH AND ACCIDENT INSURANCE PROGRAM

EARL G. M. KRIEG, M.D. (Wayne):

WHEREAS, The House of Delegates of the Michigan State Medical Society has appointed a Committee on Insurance to investigate a group health and accident plan which would contain provisions particularly suited to physicians' needs; and

WHEREAS, In group insurance, the larger group commands the greater benefits, a situation which implies a single instrument; and

WHEREAS, There are indications that all possible sources interested in competitive bidding on the contract have not been exhausted: and

WHEREAS, Six counties of this state have their own group insurance plans, which might not be exchangeable for a state plan without incurring hardships to certain of their members; and

WHEREAS, The objectives of both state and county committees on insurance are identical; therefore be it

RESOLVED, That the Insurance Committee of the Michigan State Medical Society continue its investigations for a statewide group health and accident plan; and be it further

RESOLVED, That the bidding on the desired policy be opened to all interested organizations and individuals; and be it further

RESOLVED, That the state and all interested county insurance committees meet to resolve their problems and differences, if any, so that the advantage of a single policy for the entire state membership may be attained.

THE SPEAKER: This resolution will be referred to the Reference Committee on Reports of Special Committees.

(The meeting recessed at twelve-forty o'clock.)

MONDAY AFTERNOON SESSION

September 21, 1953

The Second Meeting convened at two-ten o'clock, the Speaker, Dr. Baker, presiding.

X. REPORT OF HOUSE OF DELEGATES COMMITTEE ON CONSTITUTION AND BY-LAWS

The next item of business is the report of the special committee selected by the House of Delegates last year on the subject of special memberships, by Dr. Spalding.

EDWARD D. SPALDING, M.D. (Wayne): Gentlemen, reading the Constitution and By-Laws is always a boring matter, and this has been threshed out in the committee that did the work. They will thresh out some details in the reference committee, and I don't think I will bore you with details now. I will give you a very complete résumé of what the problem is, and present in outline form one or two things that are proposed, and the proposals will come back for the reference committee later on.

The question of membership in the State Society, on the one hand, and in the county society, on the other, is a little complex, the reason being that some types of membership are desirable at the county level and not necessarily so at the state level. For instance, the young people may join the State Society and be active members, while at the county society level there are a number of county societies that have small use for other types of membership. So the problem is not quite the same at the state and county levels.

This makes for confusion and a great deal of trouble for your Secretary, who told the reference committee to see if they could help his troubles, and we will try to iron it out and save you a little time.

Now, there are five problems that are thrown in our lap. There is the question of simplification, for instance, or probably consolidation, if I may say so, of the classifications of emeritus and life memberships.

They are almost identical, with certain slight differences. It is interesting to note that in looking over the national situation, you will find that there are 17 states that have life membership and only 8 that have emeritus, and Michigan is the only one that has both. It is the feeling of the committee that studied this summer that these might be merged, and that is our suggestion, with which you can do as you please, later on, when this comes up.

There is a resolution that was presented from Calhoun County, telling about their difficulties because they have a number of members of the Veterans Administration who wish to have a sort of associate membership with the group, which is right and proper. It seems to the committee, however, that this can be permitted provided they are not in active practice. I emphasize that—providing they are not also in active practice.

It seems to the commitee that this is already taken care of by Section 3(e) of Chapter 5, but in order to amplify this a little bit, there is one slight change that can be made.

If, on the other hand, these people are also in active practice as well as being with the Veterans Administration, it is the feeling of the committee that they should take out active membership and pay active dues like anybody else.

There is a question of the clarification—for the sake of the Secretary and the front office at Lansing—of the time through which active dues are to be paid by those who are to become life or emeritus members. This can be simply summed up in this way: If your dues are paid, and you are past a certain age or time of practice, you are eligible, and if you are not, you are not, and that's all there is to it.

When is the time? The time is when the vote is taken in the House of Delegates. Of course, you don't qualify at that moment. You don't qualify until the next year. Now, you can cut the dog's tail off in other places, but you have to cut it off at some level, and the feeling of the committee is that you might just as well cut it off. Are you eligible at the moment your name is proposed before this body? It's just as simple as that.

We have six representatives on the national level in the national House of Delegates. Our sixth delegate's position is a little bit precarious, and it was more so when the Korean war was still active, because it seemed we might have many men going to the military service, more than now seem necessary. It was very desirable that we not lose our hold on this sixth delegate to the national House.

This is a little bit off the record, but it was suggested by the national office in Chicago that it would be perfectly proper if we admitted more people to membership, in certain ways.

The question of whether you get a national delegate or not is a question of how many; not who, remember, but how many members you have who vote and may hold office. Now, by certain slight changes in the By-Laws, you could gain a very appreciable number, thereby making sure that you hold your sixth delegate in the national House.

That might be done by bringing in men who are retired, men who are inactive temporarily because of serious illness, and members of the armed forces not with the Veterans Administration—members of the armed forces, whether they are here or abroad, who are given specifically the right to vote and hold office.

It is not a question of dues-paying. By those slight changes you will assure yourselves of your sixth member in the national House of Delegates.

Then there was a minor correction concerning the changing of "meeting" to "session," which was purely a typographical omission in one of the previous revisions.

Those are the things that are proposed before you. Now, the way to accomplish this is very boring, and I won't go into detail with this, as this will be threshed out in the reference committee.

For the sake of implementing Calhoun County's motion we are suggesting that Chapter 5, Section 3 (e)—this is all under Chapter 5, Section 3 (e)—be amended by adding after "Public Health Service" the words "or physicians employed by the Veterans Administration," which will take care of that.

We can take care of adding these requisite men who have the right to vote and hold office—therefore giving us national representation—by simply putting in parentheses in the final paragraph of Section 3 (e)—"(except for those inactive because of protracted illness or those in the armed services who may have the right to vote and hold office.)" The rest of the associate members do not.

Now, under the question of retired members, in order to add the retired members to the men who can vote and hold office, so we can maintain our sixth delegate in the national House of Delegates, delete the word "not" in the last line and change "or" to "and." Then it will read that these men, retired members, will have the right to vote and hold office. That will accomplish that.

Now, as to the question of members emeritus, if it is the wish of the group—and it is recommended to you by the reference committee—that life membership and emeritus membership be merged, that could be done by deleting that Section 5 under "Emeritus," and lumping them all under "Life Membership." That may not be your wish. It is your privilege to do as you please, and you can hear from your reference committee when they go over this point.

Now, about this question of "When is a man eligible for life or emeritus membership (or both together, if you lump them)?" If they are dues-paying members at the moment that they are voted, and if they have the proper age qualification, they are eligible, and if they haven't got those two things at the very moment you vote, they aren't, and it's just as simple as that.

But, to make it a little more specific, if anybody is looking the thing up, under Section 7, "Life Membership," simply add the sentence, "with dues paid for the current year." Now, there is no argument about that. It means your dues are paid to date. If the dues are paid to date, you are eligible. If your dues aren't paid to date, you're just out of luck.

Finally, Section 10: In line 3, change "meeting" to "session." That should have been corrected before.

That's all there is to it.

Mr. Secretary, I will refer the specific changes to these various sections of Chapter 5, three copies, to you for reference, to hand to the reference committee.

(Vice Speaker Livesay assumed the chair.)

J. E. Livesay, M.D.: The report of Dr. Spalding's committee will be referred to the Reference Committee on Constitution and By-Laws.

IX—k. CANCER REPORTING

Otto K. Engelke, M.D. (Washtenaw): I have two resolutions.

WHEREAS, The Legislature of the State of Michigan in its 1953 Session gave consideration to legislation requiring every physician, dentist, pathologist, director of a pathological laboratory or clinic director who had knowledge of cancer to report the same in ten days; and

WHEREAS, It would seem to the Michigan State Medical Society that there are more economical, accurate and rapid means of gathering information from hospital records and voluntary registers without resorting to statistics laboriously gathered by such "reporting"; and

WHEREAS, Such compulsory reporting of cancer, a non-communicable disease, might well be the forerunner of additional requests for compulsory "reports" of other non-communicable diseases by the same physicians, dentists, et cetera, and other parties, to their great inconvenience and expense, and the possible detriment of their patients; and

WHEREAS, It appears to the Michigan State Medical Society that there may be a need for additional legal safeguards for physicians and hospitals for such reporting as may be done on a voluntary basis in the case of special studies; now therefore be it

RESOLVED, That the Michigan State Medical Society recommends that no change be made in the reporting requirements of the law at the present time; and be it further

RESOLVED, That the Michigan State Medical Society recommends that a joint study commission be established immediately under the sponsorship of The Council, composed of those groups interested in cancer and other non-communicable disease reporting, to advise The Council and the Society of any changes in the law which might be recommended to the Legislature in its

1954 session and, from time to time, which would be in the best interests of the people of Michigan.

(See page 1371 for amendment to this portion of Resolution)

J. E. Livesay, M.D.: This resolution will be referred to the Committee on Legislation and Public Relations.

IX—l. REPORTING VENEREAL DISEASE

Otto K. Engelke, M.D. (Washtenaw):

WHEREAS, The Legislature of the State of Michigan, in its 1953 Session, gave consideration to legislation making it compulsory for every director or laboratorian in charge of any laboratory registered with the Michigan State Department of Health under Act 45 of the Public Acts of 1931 to report all positive and suspicious laboratory tests for venereal disease; and

WHEREAS, The Michigan State Medical Society recognizes that there is a responsibility on the part of the attending physician to report venereal and other communicable disease; and

WHEREAS, The attending physician is the person best qualified to make diagnoses of venereal and other communicable disease; and

WHEREAS, It has been established that many laboratory tests in themselves do not constitute an adequate diagnosis of venereal and communicable disease; and

WHEREAS, There is no evidence that an exhaustive joint study of venereal and other communicable disease reporting by laboratories has been made in Michigan by all groups primarily concerned with venereal and other communicable diseases; now therefore be it

RESOLVED, That the Michigan State Medical Society urges that all attending physicians who have diagnosed venereal and other communicable diseases in their patients be diligent in the prompt reporting of same, but that no change be made in the reporting requirements of the law at the present time; and be it further

RESOLVED, That the Michigan State Medical Society recommends that a joint study commission be established immediately under the sponsorship of the Michigan State Medical Society Council, composed of those groups interested in venereal and other communicable diseases reporting and laboratory diagnosis, to advise The Council of the Society of any changes in the law which might be recommended to the Legislature in the 1954 Session, and from time to time, which would be in the best interests of the people of Michigan.

J. E. Livesay, M.D.: This resolution will be referred to the Committee on Hygiene and Public Health.

IX—m. STUDY OF MENTAL HEALTH PROBLEMS

Joseph F. Beer, M.D. (St. Clair):

WHEREAS, The State of Michigan is still confronted with many problems in mental health, despite the fact that physical facilities for neuropsychiatric patients in state institutions recently have been or are being expanded; and

WHEREAS, The Michigan State Medical Society, in endorsing over the years this expansion of state facilities for neuropsychiatric patients, has steadfastly cautioned that an increase in hospital facilities would be ineffective unless accompanied by provisions for the training and procurement of additional medical personnel and mental hygiene associates; and

WHEREAS, In coming months the 1954 Legislature must continue to work toward the solution of Michigan's current and unsolved mental health problems; now therefore be it

RESOLVED, That the House of Delegates of the Michigan State Medical Society instruct The Council of Michigan State Medical Society and committees on The Council interested in this work to take particular cognizance and devote maximum time and constructive thought to current and anticipated problems in mental health, so that the scientific appraisal and advice of the Michigan State Medical Society will be available to the Michigan Legislature when needed and requested, and so the Society may be prepared to present recommendations of value to the Legislature in its consideration when these problems are under study.

J. E. Livesay, M.D.: This resolution will be referred to the Committee on Hygiene and Public Health.

IX—n. WELFARE REPORTS

Paul H. Engle, M.D. (Eaton):

WHEREAS, Most physicians find it impossible to answer the questions required in the present social welfare forms without perjuring themselves; and

WHEREAS, The reporting of diagnosis to lay organizations is ethically questionable; and

WHEREAS, The refusal of physicians to complete the preesnt forms often creates undue hardship for the aged patient, and frequently creates ill feeling between the physician and his patient; therefore be it ....

RESOLVED, That the Michigan State Medical Society direct its efforts toward correcting this impossible situation.

J. E. Livesay, M.D.: This resolution will be referred to the Reference Committee on Miscellaneous Business.

XI. REPORTS OF STANDING COMMITTEES

XI—a. COMMITTEE ON P.G. EDUCATION

The Committee on *Postgraduate Medical Education* has its report on page 86 of the Handbook. Is there any additional report? If not, this will be referred to the Reference Committee on Standing Committees.

XI—b. COMMITTEE ON PREVENTIVE MEDICINE AND ITS SUBCOMMITTEES

Is there any additional report from this committee? If not, these reports will be referred to the Reference Committee on Standing Committees.

XI—c. P.R. COMMITTEE AND ITS SUBCOMMITTEES

The Public Relations Committee and its subcommittees have their report on page 112. Is there any additional report? This report will be referred to the Reference Committee on Standing Committees.

XI—d. ETHICS COMMITTEE

No report.

XI—e. LEGISLATIVE COMMITTEE

The report of the Legislative Committee is on page 121. Is there any additional report from that committee? If not, this report will be referred to the Reference Committee on Standing Committees.

Once again, gentlemen, this is something we pass over routinely in the House of Delegates, but embodied in these reports is an aggregate of hundreds of man-hours of work, which is the business of your Society and every doctor in Michigan. They are printed so that you may read them. I hope you do so.

(Dr. Baker resumed the chair.)

XII. REPORTS OF SPECIAL COMMITTEES

XII—a. THE REPORT OF BASIC SCIENCE ACT STUDY COMMITTEE

Clarence E. Umphrey, M.D. (Wayne): In the report on page 131, the Basic Science Committee report stated that the conclusions of this committee' study would be presented to you at this time. That report was sent in to get it in the Handbook, and about five days later

there was a meeting of the committee and it was the consensus of opinion that the conclusions that were drawn should be placed in your hands for study before this meeting. That was accordingly done, and, Mr. Speaker there is no subsequent report.

THE SPEAKER: This report will be referred to the Reference Committee on Special Reports.

FRANKLIN L. TROOST, M.D. (Ingham): On the committee report as reported by Dr. Umphrey, I do not believe—

THE SPEAKER: Dr. Troost, you do not have the floor at this time, whether you agree or disagree. The committee report is complete, has been filed, and it is not to be discussed at this time.

FRANKLIN L. TROOST, M.D.: I was asking if I could file a minority report, sir.

THE SPEAKER: That is not in order at this time. You had an opportunity to file a minority report. If you have a minority opinion, the Chair rules that you will present that in the reference committee, or discuss it on the floor when the reference committee reports.

DAVID C. EISELE, M.D. (Gogebic): I would like to make a motion that Dr. Troost be allowed to present his report.

THE SPEAKER: Is there a second to that motion?

(The motion was regularly seconded.)

EDWARD D. SPALDING, M.D.: May I rise to a point of order?

It is not a minority report; it it a minority opinion. The report of the committee has been filed.

THE SPEAKER: I agree with Dr. Spalding. There is no minority report. Furthermore, Dr. Troost personally has broken the rules of this organization in releasing to the public press a general discussion of a problem which wasn't to be discussed until this meeting. I feel that he is out of order and should not be recognized. If this House chooses to overrule the Speaker, you have the right so to vote, which requires a two-thirds majority.

RALPH A. JOHNSON, M.D. (Wayne): I move the decision of the Chair.

C. E. UMPHREY, M.D.: May I, as chairman of this committee, state that Dr. Troost was asked for his opinion and his conclusions? He was given a set of questions and answers, and at a later time he was asked whether or not he wanted these questions and answers printed. He said he didn't know.

He was again contacted, and he presented a different set of conclusions. Now, those were never reviewed by this committee, and therefore I cannot, or the committee cannot—as much as we would like to hear a minority opinion—approve an opinion that they have never seen.

Therefore, I say this in support of our Speaker—

(Question called for)

THE SPEAKER: Question is called for; the motion is to sustain the ruling of the Chair.

(The motion was put to a vote, and carried.)

XII—b. COMMITTEE ON STUDY OF GROUP HEALTH AND ACCIDENT INSURANCE

The report of the Health and Accident Committee, by Dr. Jones.

W. S. JONES, M.D. (Menominee): I'm not a cardiac, but I'm not as young as some.

This committee for the study of health and accident insurance has put in two years of study on it. Originally, the idea came from Dr. Yeo of Big Rapids, and he asked The Council why the State of Michigan could not offer a group policy for the doctors of Michigan, similar to the Wisconsin plan.

Two years ago this body authorized the Council to form a study committee for this purpose, and the Council appointed this committee.

The committee got the Wisconsin plan and took it up with the insurance company that carried that plan. We studied it quite carefully, and we felt that the Wisconsin plan did not fulfill the requirements that the committee thought would be acceptable to the membership of the Michigan State Medical Society, for several reasons. We recognized that it was a good plan, but we thought it was just another plan for any group of people.

We reported back last year to the House of Delegates that we had no plan at the moment to offer to the House. The House of Delegates instructed the committee to continue the study. Then your chairman was bombarded, I think, by all the insurance agents in the State of Michigan. I don't have the facilities in my office, nor do I have the financial backing to pay for the work involved, so the committee instructed your chairman to have a conference with a broker for the purpose of writing an insurance policy that would be suitable for doctors.

We took the plans of Wayne County, Kent County, a plan of the American Bar Association and a plan offered by the Provident Life & Accident Insurance Company, for study. We compared these insurance plans as to what they paid, the length of time, and so forth, and the premiums.

The insurance broker said, "We are not interested in what company you carry. All we are interested in is helping you to give your specifications to a good, first-class company. An ideal policy, one such as you would go for, would be too expensive for anyone to buy. Besides, there is no company in the United States that would write such a policy. Now, if you do choose such a policy, we will have to go to Lloyd's of London, and they'll give you a price tag."

Then we came to the conclusion that it would be better to draw up specifications of what we thought we would like to have, leaving blank what they would offer in lieu of what we had.

In the discussion we came to two conclusions: There are no cheap health and accident insurance policies. There are good policies and bad policies.

We tried to arrive at a contract that would fit the average doctor in the State of Michigan. We also tried to arrive at a policy that would be tailor-made for the doctors. For instance, in none of the standard policies do you have a clause that differentiates you from a lawyer or any other professional man. If you were in an accident and your hands were crushed, and you ended up with something like this, you would not get compensated for the loss except for a minimum, but you could not earn your living practicing medicine if you did surgery.

In the policy that is submitted and offered to the House of Delegates, we have written out the fact that a hand that can't be used is a lost member. In other words, all your policies you hold under group practice today designate the loss of the hand as a loss above the metacarpal bone; it must be in or above the joint.

Another consideration was the price of the policy. We all know that a young man is a better risk for any type of insurance than an older man. A young man starting in practice—30, 35 or 40—certainly is more anxious to take care of his family than himself. He is less fitted financially to pay for it unless he is different from, well, myself, because he just doesn't have the money to pay for it.

So, instead of giving a fixed payment as a premium, listing everyone on the same basis, we evolved the plan of a step rate, with one rate from 33 through 39, or 49. I won't say the next—I think it's 60 or 65; and from 65 through 74 or to 75, on a step rate basis.

To be actuarily sound, we have discovered that the premium paid for any policy, whether it is step rate or lump sum rate, the sum total paid must be equal to make it sound.

The committee is recommending a step plan for your

consideration, in which the young man will be allowed to carry the same amount of insurance as an older man, but he will pay his pro rata share. The older man, in turn, carries the same amount as the young man, but he will also pay his pro rata share.

Under the plan that will be offered to you, there will be a master policy issued to the State Society. To the individual, this plan will be non-cancellable as long as the master policy stays in effect.

There is no requirement as to physical findings until after the plan has been in operation sixty days. After sixty days they may require physical examination.

Under the policy, they require 50 per cent of enrollment.

We felt that $300 a month was not ample care for the physician and his family. Therefore, we thought that if one had another policy, by no means did we want him to cancel it, nor did we suggest it. We put it in as a supplement to any plan that he may have, in no way competing with anyone's present policy. If you have a policy on an individual basis or a group basis and you can carry only one, and you think it is better, that is the individual's choice, not the committee's choice for the State Medical Society.

Fortunately, I ride on a pass, and all my transportation for this study has been at the expense of the railroad company. We haven't spent any money. We have obligated ourselves to no insurance company, no broker's company, for any expense or anything in a monetary way.

The thing is to be operated on this basis, if you accept it. The company agrees to solicit every member of the State Society by mail, giving him the privilege of buying this insurance if he chooses.

After a certain length of time they will take those who have expressed a desire to take this insurance, and put them aside, and then they will take the next group of those who have not expressed their desire to have it, or are indifferent, and they will re-mail them. They wait for a reply for a certain length of time, which is the business of the insurance company, and make another inventory, separating the new applicants from the rest. Then they solicit in person with a letter of introduction signed by the State Society, asking you to give this insurance representative the privilege of interviewing you, and telling you what the insurance company does.

In this compaign, which I think will take something like two months, if they have 50 per cent of coverage in the State Society, they will issue this master policy. If they do not, we can't get the insurance. We aren't out anything. We have tried to render a job as you ordered done.

I would like to say to you that I can't see what more information public study of this problem would bring about, except more work. I'm sure the brokers would be willing to give the specifications to Lloyd's of London, a Canadian company or anyone else you choose, but in my thinking, when you have chosen the twelve top companies in the United States who write this insurance, only two gave us definite bids. No one gave us definite written bids with their answers. One company, the Continental Casualty Company, gave us an answer I defy Ed Spalding or John Schlemer to understand. I couldn't understand it. *(Laughter)*

I hope I haven't bored you with this thing, but it has been close to my heart because I have given lots of work to it. If there is anything I haven't told, I'll be happy to tell you individually, because I have enough paper in my files to start a Veterans Administration paper drive.

Thank you very much. (*Applause*)

XII—c. BEAUMONT MEMORIAL RESTORATION COMMITTEE AND SUBCOMMITTEES

This report is referred to the Reference Committee on Special Committees.

XII—d. SCIENTIFIC RADIO COMMITTEE

This report was referred to Reference Committee on Special Committees.

XII—e. ADVISORY COMMITTEE TO WOMAN'S AUXILIARY TO MSMS

That will be referred to the same committee.

XII—f. ADVISORY COMMITTEE TO MICHIGAN STATE MEDICAL ASSISTANTS SOCIETY

That is also referred to the Reference Committee on Special Committees.

XII—g. ADVISORY COMMITTEE TO NATIONAL FOUNDATION FOR INFANTILE PARALYSIS

This report is also referred to the Reference Committee on Special Committees.

(The meeting recessed at three o'clock.)

MONDAY EVENING SESSION

September 21, 1953

The Third Meeting convened at eight-fifteen o'clock, the Speaker, Dr. Baker, presiding.

IX—o. FLUORIDATION OF WATER

KENNETH H. JOHNSON, M.D. (Ingham):

WHEREAS, the fluoridation of public water supplies has been adequately demonstrated to result in the reduction of dental caries; and

WHEREAS, The safety of this procedure has been proven and accepted; and

WHEREAS, The prevention of disease has been the goal of medicine throughout history; and

WHEREAS, The American Medical Association has endorsed the principle and safety of fluoridation, as have many state and territorial health associations, the American Dental Association, the American Public Health Association and the National Research Council; and

WHEREAS, Opposition to this prophylactic and beneficial measure has been presented by the biased and uninformed; now therefore be it

RESOLVED, That the Michigan State Medical Society reaffirms the position of the American Medical Association in its endorsement of fluoridation of public water supplies, and commends the dental profession for its contribution to medicine and for this added means of prevention of disease.

THE SPEAKER: This resolution will be referred to the Reference Committee on Public Health and Hygiene.

IX—p. MHS ADVISORY COMMITTEE

G. THOMAS MCKEAN, M.D.:

WHEREAS, the Council-appointed Advisory Committee to Michigan Hospital Service has done yeoman service during the past year under the able chairmanship of William S. Reveno, M.D., in studying utilization of services of the Michigan Hospital Service (Blue Cross) Plan; and

WHEREAS, the first report of the Advisory Committee indicates the need for further study and The Council has authorized the continuation of this Committee in order that more efficient utilization of Blue Cross may result in more service to the people at less cost; and

WHEREAS, The Council has recommended that county societies and hospital staffs take action on the

subject of utilization of Blue Cross Hospital Service as disclosed in the report of the Special Advisory Committee; therefore, be it

RESOLVED: That the House of Delegates endorse the action of The Council in continuing the Advisory Committee; and be it further

RESOLVED: That the House of Delegates recommend the appointment of a special committee of the staff of each hospital-member of Michigan Hospital Service to deal with the problem of proper utilization of hospital service.

XIII. REPORTS OF REFERENCE COMMITTEES

XIII—a. REPORT OF THE REFERENCE COMMITTEE ON OFFICERS' REPORTS

1. *The Speaker's Address.*—We commend Dr. Baker on his brevity and approve the time outline and comments which set the tempo for expediting the 88th Annual Session of the Michigan State Medical Society.

2. *The President's Address.*—We approve Dr. Hubbell's address with particular reference to the statement that public relations are best promoted at the level of the patient-doctor relationships.

3. *The President-Elect's Address.*—We are in full accord with Dr. Hull's proposed project of civilian defense with the organization originating at the local level and progressing upward. We feel that in view of the recent disasters in Michigan this has an unestimable public relations value.

4. *Report of the Chairman of the American Medical Association Delegates.*—This report was reviewed in detail. We wish to commend the Chairman and Delegates to the AMA meeting for the great amount of work performed. The entire committee unanimously agreed that we are fortunate in having men of such calibre representing us at the national level.

5. *Report of the President of the Woman's Auxiliary.*—The Committee was enthusiastic in their praise of Mrs. Mackersie's presentation of the accomplishments of the Auxiliary. We were greatly pleased by the extreme number of projects accomplished and their importance to our organization. The Auxiliary accepted the challenge of the election year to aid us in local communities as well as being a factor in bringing to the polls a record vote.

We recommend that the House of Delegates as a group and individually lend all assistance possible to help the Auxiliary realize the goal of a 100% membership.

Respectfully submitted,
W. S. Stinson, M.D., *Chairman*
D. A. Young, M.D.
N. W. Scholle, M.D.
W. R. Young, M.D.
J. F. Beer, M.D.

W. S. Stinson, M.D.: I move that this report be accepted.

(The motion was regularly seconded, was put to a vote, and carried.)

XIII—b. REFERENCE COMMITTEE ON REPORTS OF THE COUNCIL (INCLUDING ANNUAL REPORTS OF COMMITTEES OF THE COUNCIL)

Dr. Carpenter read the report of the Reference Committee on Reports of the Council.

Your committee is aware of the tremendous amount of time which the members of The Council spend in considering the business of the Society and wishes to extend a vote of appreciation for their services.

It is noticed that the membership of the State Society on September 1, 1953, is 5,414 which is an all-time high.

We are pleased that the financial position of the Society is sound and wish to commend the various committees for remaining within their budgets.

We wish to compliment The Journal of the Michigan State Medical Society for its appearance, its readability, organization and the choice of subjects that are of general interest to the profession at large.

We wish to compliment The Council on the success of the seventh Clinical Institute and other organization meetings and sponsorship of the Student AMA branches at the University of Michigan and Wayne University.

We appreciate the tremendous amount of work expended in Public Relations. We wish to urge each doctor of the society to assume his responsibilities in this important field.

The Woman's Auxiliary committee is to be lauded for the continuation of its excellent work. We specifically commend the President, Mrs. William Mackersie, for her excellent report to the House of Delegates.

The Committee commends The Council for the success achieved in its contact with governmental agencies and urge that these contacts be continued.

Special praise should be given to the Michigan Health Council for its successful plan in helping to locate doctors, and we recommend that continued financial backing be given to this organization.

We are pleased to date with the progress of the Beaumont Memorial Restoration. It is recommended that the Medical Profession itself should complete this worthwhile public relations project. We urge each member to assume his individual responsibility in accomplishing this.

We wish to commend Dr. W. S. Jones and his committee for their efforts and conclusions in the study of Health and Accident Insurance. We urge all members to carefully read Dr. Sladek's report on page 78 on medical problems of the migrant worker and thank him for his untiring efforts.

After thorough study, the committee approves the recommendations of The Council but wishes to change the wording of the seventh recommendation to read as follows:

"In view of the findings of the first report of the Advisory Committee to Michigan Hospital Service, The Council is impressed by the problems. We urge the House of Delegates to permit the continued activity of the Committee and its studies in this field. The Council further proposes that County Societies and Hospital Staffs be urged to utilize the information released by The Council on these continuing studies."

Mr. Speaker, I move the adoption of the report, as amended.

L. C. Carpenter, M.D., *Chairman*
H. C. Hansen, M.D.
F. D. Johnson, M.D.
M. G. Becker, M.D.
C. W. Oakes, M.D.
H. C. Hill, M.D.
R. F. Fenton, M.D.

L. C. Carpenter, M.D.: Mr. Speaker, I move the adoption of the report as amended.

The Speaker: You have heard the motion. Is there a second?

Milton A. Darling, M.D. (Wayne): Second it.

(The motion was put to a vote, and carried.)

XII—c. BEAUMONT MEMORIAL (SUPPLEMENTAL)

I wonder if I can interrupt the proceedings to find whether you gentlemen feel that you are fully informed on the progress of the Beaumont Memorial? The Handbook report was very brief, and in the time since that report was given for the Handbook, your committee has been reorganized so there is now a permanent committee.

You may remember—as was commented on in the supplementary report of The Council—that some ad-

ditional mention was made. Will you object to listening to Dr. Beck for a moment to bring you strictly up to date on the proceedings this summer? May I call on Dr. Beck?

Hearing no contrary sign, Dr. Beck, would you make a few remarks at this time? Not too long. (*Laughter*) We know about Dr. Beaumont and his friend. (*Laughter*)

Otto O. Beck, M.D.: Mr. Speaker, I don't know how short I can make this thing.

I am very happy to report that the restoration of the American Fur Company store on Mackinac Island, is now a reality. It was restored this summer, and it is a finished building.

This summer, at the time of the meeting of The Council, we had a very fine, beautiful ceremony of placing the cornerstone. There was a nice, representative group of people there at the ceremony. In addition to the members of The Council and officers of the State Medical Society, there were: the directors of the Michigan Medical Service, the members of the advisory committee of the Michigan Medical Service, trustees of the Michigan Hospital Association, directors of the Michigan Health Council, officials of the village of Mackinac Island, the wives and children of those officials, and some of the residents on Mackinac Island.

It was a beautiful ceremony. Dr. A. H. Miller, Dr. Bromme, Dr. Hubbell, Senator Coleman of the Michigan Legilslature and Wilfrid Doyle gave appropriate talks concerning this memorial. It is planned to have a dedication of this memorial on July 17, 1954, at the time of the meeting of The Council on Mackinac Island. At that time we hope to have a fine representation of people from the State of Michigan, from the profession, and national representatives. There is now a list being prepared of those individuals who should be invited to this ceremony. Some of you may be of help in giving us the names of individuals from certain national organizations who should be invited.

Already the Upper Peninsula Medical Society is planning to have its summer meeting on Mackinac Island at that time, and I am also informed that the American Medical Historical Society is making plans on having its meeting on Mackinac Island next summer. Before we are through, there may be many organizations that will have their meetings on Mackinac Island next summer because of the Beaumont Memorial.

It's surprising, the tremendous interest that this project has created throughout the whole United States. It is particularly pleasing to me to receive letters from individuals I have never heard about, not only in the State of Michigan but from all over the United States, commending us on the project that we have just finished.

A big job is still before us, and your committee is going to have a big job to furnish it. We have certain ideas of what we would like. We have a few things.

Last year the Wyeth Corporation presented to this Society a picture or a painting of Beaumont and Alexis St. Martin. We have several other items on hand. We propose to make a museum out of the large room with the fireplace, and we hope to obtain many of Dr. Beaumont's relics. We do know that in the Billings Library and the Medical School of the University of Chicago there are many of Beaumont's relics, and we hope that possibly we may be able to obtain those relics to exhibit in the summertime and then ship them back in the wintertime for the purposes of the University of Chicago.

We have many other ideas of what we would like to do. The other smaller room is now proposed to be furnished as a store of the period of Beaumont's time, in 1822. There again, we are puzzled, not knowing what kind of store they had in 1822. We have written to the Smithsonian Institute in Washington for information. There still is a store of the American Fur Company in Winnipeg, and we have written to them. We have corresponded with many individuals about the country, and by next summer, at the time of the dedication, we hope to have a considerable amount of material collected, so that we can have things to display in this house.

We still have a long way to go on the financial project. We have spent over $38,000, and have only collected something like $30,800 to date. Not all the bills have been paid yet, and I think that possibly my original estimate that I made here two years ago, of $40,000, is going to be a little shy. I have a great deal of confidence that the doctors of this state are going to finish this on a voluntary contribution basis, because the idea of a voluntary contribution is so much better, so much finer and nobler than if we took that money out of the public relations funds of the Michigan State Medical Society. It really would mean so much, and I find that many individuals are now belatedly coming through and making contributions. They are beginning to realize its importance to the profession.

It is a beautiful project. In my experience with your State Medical Society of the past fourteen years, I can think of nothing that is so fine and so noble and so good as this, which you approved here two years ago.

Thanks. (*Applause*)

XIII—c (1). POSTGRADUATE MEDICAL EDUCATION COMMITTEE

(2) PREVENTIVE MEDICINE COMMITTEE AND SUBCOMMITTEES

(3) PUBLIC RELATIONS COMMITTEE AND SUBCOMMITTEES

(4) ETHICS COMMITTEE

(5) LEGISLATIVE COMMITTEE

Report from the Reference Committee on Standing Committees.

(Dr. L. M. Bogart read the report of the Reference Committee on Standing Committees.)

The reports were thoroughly discussed and many points of view were gone over. Your committee feels that the various committees and their Chairmen are to be commended upon the complete presentation of their reports and feels that they are of great value in understanding the problems confronting our society. It especially commends the Woman's Auxiliary for its splendid work and innumerable services rendered to the citizens of the State of Michigan by the work they have done in helping out the Michigan State Medical Society in promoting good will and social contact. There is one point of the report on Medical Education Committee in that no spring meeting was held in Southwestern Michigan. The need for it has been expressed by several Committee members. The Committee wishes to express its thanks for the counsel rendered as well as the guidance of Councilors consisting of Drs. Harvie, Saginaw, Miller, Grand Rapids; Slagle, Battle Creek.

Respectfully submitted,

L. M. Bogart, M.D., *Chairman*
L. E. Irvine, M.D.
S. A. Fiegel, M.D.
J. J. Lightbody, M.D.
L. F. Brown, M.D.

L. M. Bogart, M.D.: I make a motion that the report be accepted.

(The motion was regularly seconded, was put to a vote, and carried.)

XIII—d. REFERENCE COMMITTEE ON REPORTS OF SPECIAL COMMITTEES

XIII—d. (1) 1952 RESOLUTION RE SIMPLIFIED INSURANCE REPORTING FORMS

(Part of 1953 Council Committee Report)

CLAUDE L. WESTON, M.D. (Shiawassee):

The first resolution considered was that concerning the simplified insurance reporting forms, which have been favored by the AMA. This is the result of the action of the 1950 MSMS House of Delegates. The forms as presented were acceptable to the Committee, and it is hereby recommended that they be adopted.

Mr. Speaker, I move the adoption of this report.

R. WALLACE TEED, M.D. (Washtenaw): Second the motion.

(The motion was put to a vote, and carried.)

THE SPEAKER: The motion is carried.

XIII—d (2). RESOLUTION RE FURTHER STUDY OF HEALTH AND ACCIDENT INSURANCE PROGRAM

CLAUDE L. WESTON, M.D.: The next resolution was that introduced by E. G. M. Kreig, M.D., which proposed a further study of the Committee on Study of Health and Accident Insurance. After a thorough discussion of all angles, it is recommended by the Committee that this resolution be not adopted.

I move the adoption of this report, Mr. Speaker.

(The motion was regularly seconded.)

THE SPEAKER: Is there any discussion?

R. L. NOVY, M.D.: What do you mean by not adopting?

CLAUDE L. WESTON, M.D.: That is disapproval of Dr. Krieg's motion.

R. L. NOVY, M.D.: Could I hear Dr. Krieg's resolution?

CLAUDE L. WESTON, M.D.:

WHEREAS, The House of Delegates of the Michigan State Medical Society has appointed a Committee on Insurance to investigate a group health and accident plan which would contain provisions particularly suited to physicians' needs; and

WHEREAS, In group insurance, the larger group commands the greater benefits, a situation which implies a single instrument; and

WHEREAS, There are indications that all possible sources interested in competitive bidding on the contract have not been exhausted; and

WHEREAS, Six counties of this state have their own group insurance plans, which might not be exchangeable for a state plan without incurring hardships to certain of their members; and

WHEREAS, The objectives of both state and county committees on insurance are identical; therefore be it

RESOLVED, That the Insurance Committee of the Michigan State Medical Society continue its investigations for a statewide group health and accident plan; and be it further

RESOLVED, That the bidding on the desired policy be opened to all interested organizations and individuals; and be it further

RESOLVED, That the state and all interested county insurance committees meet to resolve their problems and differences, if any, so that the advantage of a single policy for the entire state membership may be attained.

R. L. NOVY, M.D.: Mr. Speaker, may I address myself to that resolution?

THE SPEAKER: You wish to discuss this?

R. L. NOVY, M.D.: Yes. This is a resolution that involves handling of insurance policies for the State Society, and also has reference to other policies that exist in the State Society.

Several things should be borne in mind in regard to a group policy, wherein group rates are obtained because of the size of the group. In the experience of the Michigan Medical Service, you will recall that one of the early problems that we had was that we took in only a small percentage of the available people with adverse selection and definitely considerable loss, notoriously, the Chrysler group. We cannot duplicate or we duplicate with difficulty when you take in a group policy to cover two or more group policies to cover a given group. Neither company gets the proper distribution for its risk, nor are they allowed the latitude to change and increase and improve the policy that they have.

I have personally gone over, in so far as possible, all material that has been available, but not being satisfied either with that opinion or other opinions, I took it upon myself to contact some insurance actuarial people in a consulting capacity. Specifically, I wrote to the company of Wolfe, Cochran & Linder, consulting actuaries, auditors and accountants in New York City. That company is well known throughout the United States because of its experience in insurance rating and insurance problems. This particular concern is one that has verified experience rates and proposed rates for a great many insurance organizations, notably the Blue Shield and the Blue Cross.

At the time that Michigan had to raise the rates in order to be sure that our rates were justified, we had this firm come in and check the rates to see whether or not they would substantially cover our costs, and we relied on their verification of those rates to check our own proposals.

This company has been engaged in a California situation where they had difficulty with their rates, and they handled that matter. In Louisiana they are engaged by the New York Life, which, so far as the Blue Shield and Blue Cross are concerned, is much larger. So their experience is extensive.

I wrote, sending them material that was available on this particular problem, and asked their opinion. I am going to read that opinion for what it's worth. This is the opinion of men who are experts in handling insurance matters, particularly with regard to the questions, "What are you getting for your dollar?" and "What are the advantages and disadvantages?"

This is under the date of August 31, addressed to me. "Under recent date there was forwarded to me material regarding proposed group accident and sickness coverage for the members of the Michigan State Medical Society. This material included supplementary reports by Marsh & McLennan (known as M&M later) dated July 21, 1953, indexed comments regarding this report, and clarifying letters from the Continental Casualty Company and the Provident Life & Accident Insurance Company.

"Since it is our understanding that M&M participated in drawing up the specifications, it is rather surprising to note that only two out of the twelve companies submitted proposals, with neither company adhering fully to the specifications. Also, we are at a loss to understand the omission in the lists of twelve of certain leaders in this field, Connecticut General, Washington National, National Casualty and so on.

"It seems to us that one of the most important questions is that of level rate versus step rate. Generally speaking, we think that with a reasonably high percentage of enrollment, the level rate is to be preferred. While the level rate penalizes the younger ages, the penalty is usually not serious, and is compensated for at the older ages.

"The step rate, on the other hand, may cause dissatisfaction when it is periodically applied, no matter how well the step rate is publicized. Many doctors will be surprised when it is applied.

"In the present instance, the Wayne County Medical

Society is already on the level rate basis. Attempted integration of this level rate group into a step rate, state-wide group, would probably cause difficulty, since the younger members would probably transfer, thereby substantially increasing the charge to their older members, with the possibility of destroying the Wayne County Medical Society group.

"While under ordinary circumstances we would still prefer the level rate, in the present instance it would appear to be particularly important to retain the level rate.

"So far as weekly indemnity coverage is concerned, the Continental's plan not only permits higher maximum coverage—$400 per month versus $75 per week—but it is more flexible, in that a wider range of selection is available, with $100 per month up to $400 per month, versus $50 per week up to $75 per week.

"Presumably the Continental's limitation of impaired risk to $100 to $200 per month would not be enforced if enrollment is in excess of 50 per cent.

"While the Provident's limiting age of 75, against the Continental's limiting age of 70, appears attractive, the reduction of coverage from $75 per week to $50 per week at the age of 66 must be weighed against Continental's continuation of coverage of $400 per month to age 70. On this basis the Continental's proposal appears to be much more attractive.

"It is noted that the Provident includes accident, death and dismemberment benefits, while the Continental is probably willing to include similar benefits. It should be kept in mind that accidental death benefit is partial life insurance, and in a much too small amount. The dismemberment benefit is a relatively inexpensive frill, which accounts for its being offered in such a large amount, $10,000, when compared to the accidental death benefits—$2,500 to $3,500.

"It seems to us that the Michigan State Medical Society should separately consider its life insurance needs and its loss-of-earning-power needs. The life insurance needs would be better met by a group life policy covering death from all causes, while the loss-of-earning-power needs are admirably met by the weekly indemnity benefits of a group accident and sickness policy.

"Aside from the foregoing, which seems to us to be of controlling importance, there are numerous differences which are relatively unimportant. All of them seem to be of the 'window dressing' type.

"Presumably the Continental has done a satisfactory job with the Wayne County Medical Society on a contract which seemed well designed to meet doctors' needs for protection against loss of earning power. Unless service on claims is particularly bad, or costs demonstrably too high, we would be loath to consider a change in carriers. We should be even more loath to consider a radical change in coverage, such as the introduction of accidental death and dismemberment benefits, since we think it is undesirable to introduce limited life insurance protection into complete loss-of-earning-power protection.

"We would suggest that the members of the Michigan State Medical Society be informed that they get what they pay for. Both carriers are reputable, well financed, and leaders in the field. Differences in costs, for comparable benefits, will ultimately be slight.

"In this connection we do not understand M&M's—that is, Marsh & McLennan Agency—statement that 'The premiums are, in our opinion, lower than those afforded under the Continental plan, even though the plans being compared are not similar.' "

If an actuary who is an expert in that field cannot understand that, I will not ask you to understand the difference.

Also, they "prefer the step rate basis in allocating the premium to where the greatest risk lies, rather than charging the same premium to everybody and reducing the benefits on those who are considered impaired risks.

"The latter statement overlooks the reduction in benefits under the Provident plan provided at age 66 against no diminution under the Continental until age 70.

"Also, and more important, we do not think that the Continental will reduce benefits on impaired risks if there is a satisfactory percentage enrollment."

Irrespective of discussion with regard to details—which is a matter that only an actuary and an experienced man can handle, and that is referred to in this—I call your attention to the fact that two groups on a group basis cannot exist side by side without impairing the function of both. That is to say, neither concern will be able to get along with a partial bit of the package.

Your own Blue Shield maintains that if it goes into any group, whether it be doctors or Chrysler or any other, they must have a 75 per cent enrollment, otherwise they do not care to go into that, having been thoroughly scorched with lesser percentages.

I call your attention to the fact that in both of these cases, the insurance involved is from reputable concerns. I call your attention to the fact that one concern has a substantial percentage in Wayne—and, I believe, in Jackson County and elsewhere—and that the introduction of another is going to impair both.

I speak in behalf of Dr. Krieg's resolution—that further study be given to this problem before action is taken.

J. H. Schlemer, M.D.: I move that this resolution be recommitted to the Reference Commitee.

(The motion was regularly seconded.)

The Speaker: Dr. Novy, how long have you had that statement that you referred to?

R. L. Novy, M.D.: In my possession?

The Speaker: Yes, sir.

R. L. Novy, M.D.: Since the 31st of August. I did not intend to bring this out unless there would be difficulty with the report.

The Speaker: I was just wondering if it was fair to your reference committee if that information had been withheld.

R. L. Novy, M.D.: I was not able to be present. I understood that it would be brought up at that committee; as I stood in the back of the room, I understood that it had not been brought up. I heard the adverse report on it, and I took occasion, therefore, to read that report.

The Speaker: There is a motion to recommit this portion of the report back to committee. Is it seconded?

Louis F. Hayes, M.D. (North Central): Second it.

The Speaker: Any discussion? All in favor of recommitting this motion back to the reference committee, say "aye"; opposed, "no." It is so ordered, and will be recommitted to the reference committee.

Will you proceed with your report?

XIII—d (3). ANNUAL REPORT OF COMMITTEE ON GROUP HEALTH AND ACCIDENT INSURANCE

Claude L. Weston, M.D.: The Committee urges the adoption of the report of the Council's Committee on Study of Health and Accident Insurance as presented by Dr. W. S. Jones this morning.

I move this be adopted.

R. Wallace Teed, M.D.: Second the motion.

The Speaker: Is there discussion on this motion?

Ralph A. Johnson, M.D. (Wayne): It seems to me that this portion of the report should also be referred to the reference committee, and I so move.

(The motion was regularly seconded, was put to a vote, and carried.)

XIII—d (4). ANNUAL REPORT OF BASIC SCIENCE STUDY COMMITTEE

CLAUDE L. WESTON, M.D.: The report of the *Special Committee on Study of the Basic Science Act* was the next item of business. The majority report, signed by three members of the Committee, was introduced—

E. D. SPALDING, M.D.: This is not a majority report; this is the report of the committee.

CLAUDE L. WESTON, M.D.: It is labeled the majority report.

E. D. SPALDING, M.D.: So it's labeled in error.

CLAUDE L. WESTON, M.D.: I stand corrected.

The report, signed by three members of the committee, was first introduced and read. Following that, the minority opinion was introduced by the minority member of the Committee. A free discussion of the report followed, participated in by all members of the Committee, and by a number of proponents and opponents of both reports.

The Committee, in closed meeting, further discussed the evidence, and by a vote of 4 to 1, the report of the commitee was adopted. Two members who were on the original study committee abstained from voting.

The Reference Committee wishes to compliment the entire study committee on the great amount of time and energy expended in developing and presenting their reports.

Mr. Speaker, I move the adoption of this report.

THE SPEAKER: Is there a second to that motion? Supported by Johnson, of Wayne. Is there discussion?

F. L. TROOST, M.D.: I would call to your attention that this committee report has not been read to this assembly.

I will read Robert's Rules of Order: "When the entire paper has been amended to suit the committee, they should adopt it as their report, and direct the chairman or some other member to report it to the assembly."

I feel that the men should hear this report, so they will know what they are voting on.

THE SPEAKER: Does the House wish to hear the report? It has been mailed to you, I believe, but it seems you would like to have it read.

Would you like to read it, Dr. Troost?

F. L. TROOST, M.D.: I shall have something to say about it afterward; I am a little hoarse now. I would prefer that someone else read it.

THE SPEAKER: Which report was it vou wished read? The report of the committee or your opinion report?

F. L. TROOST, M.D.: Not my report, Dr. Baker—the report of the committee.

THE SPEAKER: The report of the committee. The Chairman of the Reference Committee will read it for you, sir.

CLAUDE L. WESTON, M.D.:

Conclusions of the Basic Science Study Committee

Safeguarding and improving the health and welfare of the people of Michigan is the paramount issue in these considerations and any conclusions or recommendations that are made are predicated upon that principle and directed toward that end. The basic problem is: What attitude with regard to this law will result in the greatest good for the people of this state? With this thought in mind, we offer the following conclusions.

1. The Basic Science Law of Michigan regulating the practice of the healing arts has not protected against legalized substandard healers in the past.

2. We believe a perfected and universally accepted Basic Science Law is necessary to protect the health and welfare of the citizens of this country. In the period 1927 to 1950, 2,996 Osteopaths took the Basic Science Examinations with 1,754 passing and 1,242 failures. In the same period 1,984 Chiropractors took the examination with 666 passing and 1,318 failures. From 1927 to 1937, 12% of the doctors of medicine failed, 41% of the osteopaths and 74% of the chiropractors failed. These statistics are submitted to show what has been accomplished, with imperfect Basic Science Laws that in some states have been poorly enforced.

3. Bill No. 251 to amend Act 59 of the Public Acts of 1937 of Michigan has improved our Basic Science Law an estimated 25%. (Recommendations of Michigan State Medical Society Committee of Seven of 1950-51 to study the Basic Science Act.) What we need most is proper conduct of examinations and enforcement of the law.

4. Our Basic Science Act needs further amendments pertaining to such matters as composition of the board, compensation of board members, conduct of examination, fee for examination, time of examination, uniformity throughout all states, penalties and enforcement.

5. A uniform law should be drafted taking into consideration the suggestions from the Bureau of Legal Medicine of the American Medical Association, and the papers of Drs. J. Earl McIntyre and O. E. Madison. This law then should be submitted to all state medical societies urging that they lend every effort in obtaining its approval by their state legislatures, after it has been approved by our AMA House of Delegates.

6. A uniform basic science law should serve equally well in a state having a composite board or multiple boards.

7. Basic science laws are constitutional.

8. No basic science law has been repealed although at least two attempts have been made to do so.

9. To the best of our knowledge, no bill is pending at the present time for repeal, and no new states are considering enactment of basic science laws.

10. The problem of obtaining residents, insofar as the basic science law is concerned, in hospitals having a teaching program no longer exists except in a few isolated cases. On a basis of 41 replies to the MSMS questionnaire sent to all hospitals in the State of Michigan 50% designated a marked improvement, 20% were not approved for resident training and 30% noticed no change.

11. From our communications, 36 in number, with the American Medical Association, other state medical societies and state boards of examiners we conclude:

1. That the basic science laws of the various states have functioned exceptionally well.

2. That these basic science laws have acted as a deterrent to substandard practitioners of the healing arts, except where not properly enforced.

3. That these basic science laws have not deterred M.D.'s from entering practice except in a few special instances.

4. That the problems raised by the various examining boards could be eliminated by adopting accepted universal principles governing qualification in the basic sciences, by the various state legislatures.

12. A study was made of 205 questionnaires sent to graduates from Wayne University School of Medicine, who although natives of this state decided to practice outside of Michigan. From the replies it was found that only three had been influenced by the difficulties presented by our Basic Science Law. Two of the three however, explained that having passed our Basic Science examinations aided them in gaining reciprocity elsewhere. 85% were of the opinion that it was not a deterrent on any doctor wishing to practice here.

13. We believe a composite board functions better than multiple boards in its control of licenses to those who practice the healing arts.

Because of the above conclusions, we urge that the resolution presented to the 1952 House of Delegates, favoring repeal of the Public Act No. 59 of the regular session of the legislature of the State of Michigan, 1937, be not adopted.

We recommend that a basic science study committee continue to function. This committee should work in

conjunction with our legislative committee and our Public Relations Department. Further revisions and amendments should be worked out concerning the composition of the Basic Science Board. Rules governing the education and qualifications of the applicant should be definite, clearly stated, and acceptable to all state medical societies, and if all qualifications are met the approval by the Board should be mandatory. The rules governing time, place, frequency, cost, content and who is responsible for conducting the examination must be clearly stated in the law as for the CPA's. Adequate funds must be placed at the disposal of the Basic Science Board to cover all the expenses of conducting these examinations and the proper compensation of the board members, so that no hardship will be entailed by board members in their personal supervision of the examinations and in correction of papers which is their legal responsibility. Every possibility of collusion during the examination must be eliminated as this would completely nullify the intent of the Basic Science Law.

The final recommendation would be that our basic science law, as finally written be submitted to the AMA House of Delegates for its approval. When approved, it should then go before the 48 state medical associations as well as Alaska, Hawaii and the District of Columbia. With the backing of the AMA House of Delegates and the very apparent health protection for every citizen of the U. S., it would be reasonable to expect co-operation by the various state legislatures.

If this House of Delegates should vote to repeal the Basic Science Law, we will then be charged with the duty of obtaining new legislation to protect the citizens of this state from the substandard practitioner. All of you are aware of the tremendous task this would impose. It would seem that perfecting what we have and improving its administration is the logical answer.

Respectfully sumbitted,

C. E. Umphrey, M.D.
H. A. Furlong, M.D.
D. W. Thorup, M.D.

E. D. Spalding, M.D.: Mr. Speaker, in view of the fact that this matter has been ostensibly debated this afternoon in committee—which is the purpose of committee functioning—and without limit, in fact, debate has been held until many people are somewhat fatigued, I move that debate on this matter be limited to ten minutes a speaker.

J. H. Schlemer, M.D.: Second the motion.

The Speaker: This is not debatable, and requires a two-thirds vote. A show of hands, please. Those in favor of the motion, hold up their hands. Those opposed to it, please hold up their hands.

L. F. Foster, M.D.: The vote is 76 to 19.

The Speaker: The motion is carried. Is there further discussion? The motion before you is to accept the report of the Basic Science Study Committee.

Otto K. Engelke, M.D.: Mr. Speaker, the opinions I will express this evening are my own, and do not represent the opinions of the Washtenaw County delegation as a whole.

I think that in considering this Basic Science Law, there are several very important principles that cannot be ignored. One is: Just how much governmental regulation does this group really want in the profession? It strikes me that the philosophy of this group has been rather clearly expressed in the past, and has been one of freedom from governmental regulation. I am a little surprised at the apparent strength of those of you who, in this particular instance, want it.

I think there is another principle which you should think about, and that is that throughout the discussion of this basic science law, there has been no single statement even pretending to show how this basic science law has been instrumental in bringing more good practitioners to Michigan. I submit to you the idea that maybe that is what we need in Michigan.

I have failed to find anyone to testify that the board as now constituted—giving basic science examinations without a single physician represented—is basically psychologically constituted to give examinations to future physicians of Michigan.

I would like to speak of one other principle, and that is that it has not come to my attention in my rather meager study of history that not any of the 48 United States or territories ever passed a uniform state regulation of any kind. I don't see by what token we expect them to do so now.

These will be state legislatures you are asking to pass legislation. You are asking governmental officials to control your profession. I don't think they will do exactly what you want, or do the same thing in 48 states and all the territories. I submit that again we will be faced with confusion.

I submit it is a little unusual that this body should be subscribing to a national uniform regulation by governmental officials. That doesn't ring just exactly true.

I would submit one more thing (I think I raised this question once before) and that is that I doubt very much that any government, state or otherwiwse, will ever be able to regulate the quality of medicine, even if this group should, in effect, say that it wants them to. I suspect that the American people will determine the kind of medicine they want, and they will get it, and the best way to give it to them is to practice the best medicine we know how, and not to ask our governments to regulate things for us.

I believe that in medicine, as in every other profession or business in these United States, the old law of supply and demand should be allowed to operate, and so should the factor of competition. I don't believe that in medicine—any more than in anything else—we need governmental regulation.

The Speaker: Is there other discussion?

Roger V. Walker, M.D.: (Wayne): I have thought about this basic science law for a good many years. I happened to be in on one of the early committees that worked on it in Wayne, preliminary to the discussion at the state level. It was my understanding at the time—and I have had no reason to think otherwise—that the original conception of the basic science law was to provide a platform under which men seeking to practice the healing art would first have the fundamental training in the basic sciences. If, at the end of two years—or such time as it was necessary to get that training—they would take a basic science examination (one of the reasons why there were no doctors proposed for that basic science committee or board was so that the candidates for any one of the three healing arts, so called—medicine, osteopathy, or the third one, chiropractic—would have an equal standing for the protection of the public) and prove that they had that fundamental training, then if they would choose one against the other, it was not without at least knowing the fundamental, basic knowledge that anybody practicing the healing arts would have.

I don't see why the basic science law, as it was originally conceived., isn't fundamentally right today. It has its imperfections; we all know that. But that is apparently in the administration of the law. If a man has had basic science training, and he passes it, what difference does it make to us whether he chooses to practice osteopathy after his further training, or chiropractic, or what not? At least he knows the fundamental part of what he should have in the treatment of people, regardless of his method. I think that was the original reason for developing and passing the basic science law.

With that idea in mind, we are not trying to shut the others out, as some have contended since, but simply to provide a protection to the public in this manner, and I don't see why it doesn't resolve itself back to the fact that we should leave that law as it is, amending it as often as necessary, or in sufficient ways to protect the public.

We all talk about our idealism in caring for the public.

After all, at least theoretically, that is what most of us do, and I think that practically all of us do. If a man, under his own conscience, wants to practice chiropractic and treat somebody, if he has had the fundamental training, that is something he has to square himself with.

As for passing the basic science law, I admit that none of us in this room could probably pass it today, as we are, but if we wanted to come into the state for any good reason, we could sit down and study a while and pass it. Somebody said this afternoon that it might take thirty days to study up to pass it. What is thirty days if you are trying to prepare yourself for a lifetime type of work? Of course you may have been well trained at the time you wanted to come in here, but perhaps you couldn't pass. But thirty days, sixty days, two months—those who pass it must train themselves enough to do it.

I don't think this law should even be considered for repeal.

Oliver B. McGillicuddy, M.D. (Ingham): Mr. Speaker, I request the privilege of the floor for Dr. Christian of Lansing, who would like to speak on this matter.

The Speaker: I see no reason why Dr. Christian should not be heard. Is there any objection? If not, Dr. Christian, will you take the floor?

L. G. Christian, M.D. (Lansing): Mr. Speaker and members of the House, I deeply appreciate this honor and privilege of addressing you.

I was the Chairman of the Legislative Committee of the Michigan State Medical Society that passed this law. I was terribly enthusiastic about it; I worked night and day. I lost $8,000 from my practice in the year that I spent in working with the Legislature, and I have been loathe to think of repealing or amending the law, because I thought it was good. It took me a long time to realize that the basic science law was not doing the things that we expected of it. However, I began to see some faults in it, and if you will remember, I addressed the House, through your courtesy, three years ago, and I said "Amend it, and do not repeal it." I'm not sure yet that certain amendments couldn't be made to it. And you could do something about it.

The majority report shows nothing and advocates nothing with the exception of keeping it on the books and giving it further study.

I would like to tell you of a little experience of mine. In the past three years I have had three men who were eligible for the American Board of Internal Medicine. One man, particularly, had his pre-med at Yale, graduated at Columbia, had two years' internship, and went to the Navy; he came back and spent four years in the Leahy Clinic.

Frank Allen, who is the head of the medical department at Leahy, knows me, and knows the boy, and wanted to get us together. He came to Lansing, and thought the proposition was wonderful, and wanted to come. Then, what about a license? We called Earl McIntyre, and he had to take a basic science test. He said, "Oh, Doctor, that's ten years behind me. I won't do it." And I had the same experience with two other men.

Unless this law is made workable or repealed—Troost has documentary evidence that it is unworkable at this time. Ed Spalding says you can pass the examination in five days, and I'm sure he can. He's the only man in Michigan who can do that.

Now, as to the committee report, gentlemen, they don't advocate anything with the exception of going to the AMA and having the AMA passing a resolution approving it and sending it to 48 state legislatures and having them pass a really ideal law. Well, gentlemen, I fooled around with the Legislature in Michigan, and I wore myself out. It will take a long time to pass it in those 29 states that do not have it now, and how in the name of God are you going to ask people in the 48 states and (they left out Jamaica, I think) Alaska, Hawaii and the rest of the islands, to pass the same law?

I agree somewhat with the previous speaker. Do we want regulation? Why, we beat Stevenson last year because we were afraid of the New Deal and regulation. If you're going to have regulation, well, you can have it. I don't want any part of it.

With this thing, without a single constructive proposition, they are asking you to go on and continue study.

What I'm afraid of, gentlemen, is this: If the Michigan State Medical Society does not do something about its own basic science law, the House of Representatives and the Senate at Lansing will do something for you. They'll repeal it, or they'll amend it so that you'll not like it. You're in very definite danger.

I have been approached personally by Representatives and Senators—when I was there on another business, not medical business—who needled me and said, "What about this basic science law?" I assured them that I was not a representative of the Michigan State Medical Society, that I held no office, that I was there merely to get an appropriation for welfare to take care of the poor people, and I wasn't interested in basic science, per se, that I had no authorized opinion; and I gave them no personal opinion.

Now, I don't know what you should do, but I do know that if you do this, you're passing the buck. I'm astounded that a committee appointed by this House to go out and find facts would come in with a bunch of stuff such as this, without one single amendment that you could take to the Legislature and say, "Well, we're going to pass it in all 48 states."

This afternoon, at the committee meeting, the remark was made that, "Well, we have a national board of medical examiners," and this gentleman inferred that this was other than a voluntary thing, that it is not official and it is not accepted by many of the board of medical examiners.

To me, if you do that, you're passing the buck; you're putting your own business in laymen's hands and in the hands of the Legislature.

You saw what was in the Free Press this morning. They're just getting a little tired of it. So you'd better do it one way or another. I don't know which way you want to do it. If it can be amended properly, why didn't this study committee bring in certain recommendations and say, "This is what we're going to do to make it work"?

Henry Cook, M.D. (Genesee): I would like to state that I am not actuated by anyone or any group in this room, or otherwise, to speak on this subject, but I do have upon my mind some things that I would like to say.

I was president of the Michigan State Medical Society when the basic science act was adopted, and I will say that Dr. Christian worked just exactly as he said he did, and he was wholeheartedly for it. More power to him! But he has stated, also, that there are two courses open to you—one, to repeal, the other, to improve the act I am in agreement with him in regard to that; however, I cannot agree with the philosophy of repealing this act.

Is there anyone in the room who says that there is nothing gained by that act? If anything wasn't gained by it, it has been entirely failure of enforcement.

I asked a man who is in the Health Department to give me reports on those who had passed the act—how many osteopaths, and so forth; how they got their examinations over a period of years—but I have never been able to find that. I have spoken to the Attorney General, and explained the situation to him, and it is apparent that the enforcement of this act, the manner in which it has been inforced, has discredited it.

Now, in this newspaper article (I know this man who wrote it very well; have known him for a great many years) the writer is undoubtedly trying to force something upon you here. I won't ignore him, because you must use sound judgment.

Now, I'd like to call attention to another thing. Dr. Christian states that this committee majority report had no program. I would also like to call your attention to the fact that those who wanted repeal of this have no program, and until you have a program which is constructive, which you, as a Society, can approve of and support, you would be very foolish to lose anything that might have been gained—surely little has been lost, if anything—and I would hate to see you go back to the days of 1937 when this act was adopted.

Again, I would like to state that I am simply expressing a personal view in this matter. It's a good thing this has come up; it will probably stir you up to do the thing that you ought to have done five or ten years ago—get this law enforced.

THE SPEAKER: Is there some other discussion?

ROGER V. WALKER, M.D.: Mr. Chairman, can I say another word?

In what I said before I didn't mean to infer that I agree with this committee report.

With all due respect to Dr. Christian, I know what he did years ago, and I, too. I had the misfortune to have a couple or three men who wouldn't try to pass that examination. That is unfortunate. But you have to realize you're dealing with personalities, individuals. They may not think it is worth while to take that examination.

What Dr. Cook says is more to the point—don't throw out what you've got that has a lot of good in it. Keep it, amend it, and let the committee work on that proposition. That is what I think they should have been doing. As a matter of fact, the little change made this last time is an improvement over what they had, and I think a much greater improvement with one or two simple amendments can bring forth what we all want.

THE SPEAKER: Is there other discussion? Dr. Troost?

F. L. TROOST, M.D.: Mr. Speaker, members of the House of Delegates: The question was asked me today, "What is your interest in this law?" I have no interest in it whatever, except that I have come to the conclusion that, after nearly seven years of continuous study of the licensure laws of our country, this law is doing the people of our state a vast harm.

Now, I would like to agree with what Dr. Christian says about the report of the committee, in which they claim it has improved it 25 per cent, but just let's see what has happened to this law since it went into effect, or this amendment, rather.

In the first place, last year was the first year in many years that the chiropractors did not introduce a bill to repeal the basic science law. And why? I will read to you from the *Michigan Chiropractic Journal* of May, 1953. I won't have time to read it all.

"In October, fifteen chiropractors took the examination, and ten passed. In February, 1953, fourteen took the examination, and eleven passed, for a passing rate of 72 per cent. In addition to that, twenty-six chiropractors have been certified into the state from September, 1952 to April 15, 1953, a total of forty-seven new chiropractors."

Well, I guess we're not keeping them out, and apparently the law as amended is what they like.

Now, with regard to the osteopathic question, there are today 11,000 and some osteopaths in the country, and we have nearly 1,100 in Michigan, and, I think, around 800 chiropractors.

The basic science states, as a whole, contain 35 per cent of the osteopaths of the country, and less than 25 per cent of the M.D.'s, and if anyone thinks that the basic science laws keep out osteopaths or chiropractors, they are very gravely mistaken. They are an invitation to come in, for this reason. The basic science states as a group are short of doctors. All told, on a national population average, all the basic science states are 10,000 doctors short, and 35 per cent of the osteopaths settle in those states.

Take our own State of Michigan. Michigan is a fast-growing state. I can't read all this to you, but I have census figures which show that Michigan, from the period of 1950-1952, gained 160,000 people, going up to 6,700,000 people. In three years' time we are going to deliver 500,000 babies in Michigan, and we are going to have about 160,000 or 170,000 deaths. Now, who is going to take care of those people? The osteopaths? The chiropractors? It looks that way.

In the last decade we gained only a net of 575 doctors in this state, and we are doing that today, and hardly that. In the past, some years we have licensed about 400 to 425 doctors in this state each year. About 200 have left by reciprocity, leaving 225. Somewhere between 100 and 150 have died; some have retired. Our net gain of doctors is fifty or seventy-five per year.

This last year we licensed 385 doctors, the fewest in the last seven years. Now, they talk about their reciprocity and their waivers, coming in on this basic science amendment; only twenty-three came in during this past year on waiver from basic science states, out of 138 who were licensed by reciprocity.

I also call your attention to the fact that in the last two years, those coming into this state by reciprocity have dropped from around 200, five years ago, to 130 and some now. Why? Because our "grandfather clause" is catching up on us. There aren't enough of the older fellows to come in.

In 1947 Mr. William Burns, Executive Secretary of this Society, said that we were short 1,550 doctors at that time. How many are we short now? Now, what are we going to do about it?

The point I want to make is this: There are 43,000 doctors in the basic science states outside of Michigan. There are 150,000 of them in the rest of the states which don't have basic science laws. And we talk about protecting our people. Don't you think the people of Indiana, Illinois, Ohio, Pennsylvania and New York are protected? Are we practicing any better medicine than they? We are not. And our potential pool of young doctors is from Pennsylvania, New York, Ohio, and Illinois, which all have more than the national average.

I have also heard of many other doctors who have lost valued men. A radiologist at St. Lawrence lost two very capable men; they wouldn't take the basic science examination. We have interns from Ohio, and they say, "I passed the national board, and I'm not going to take another exam. I'm going back home. I won't stay in Michigan."

Well, you can look the state all over. You don't need to confine it to the rocky shores of Lake Superior, or our far northern plains. You can go right down to Macomb County, and you'll find one district right there with 105,000 people and twenty medical doctors, right on the outskirts of Detroit. Some of the districts in Oakland County have one doctor for every 3400 people.

In my own county, Ingham County, we have osteopathic hospitals, too. It isn't that the doctors can't get hospitals.

In 1950 we had 60,000 people outside of Lansing and East Lansing, and there were twelve of us to call on them. They say that referred work goes to Lansing. Of course, it does; they send a lot of it there, but when it comes to a common emergency in the home, I and the eleven other doctors take care of that, and we're covering 5,000 people each.

Now, do you think that we can give those people proper care? We cannot. I know we cannot. I know I can practice better medicine than I do.

Now, we've been talking about doctors. Let's get to people for just one minute, and I'll close. Today in Michigan there is one doctor for every 1,193 people, and in the country as a whole the average is one to every 996. Michigan stands thirtieth in the list of people per doctor. There is no state east of the Mississippi River and north of the Ohio as destitute for medical care as we are.

I don't know if the basic science law is a whole answer or not, but I know it is a big share of the answer, and I want to tell you this, that for every doctor who does not come into Michigan because of the basic science law—either through failure or otherwise (we had ninety failures a year)—we have deprived 1200 people of medical care. Twelve hundred people have been deprived of a chance for health, and, in the case of some of them, of a chance for life. In voting on this matter, I want you to consider that. I want you to consider yourselves not as voting on the basic science law, particularly, but voting on whether or not you protect the welfare and health and safety of the people of Michigan.

It is true that some more chiropractors will probably come in, but there will be a lot more doctors come in, and the good the doctors will do will more than offset the harm that the few extra chiropractors will do.

E. D. Spalding, M.D.: Mr. Speaker, may we hear from Dr. Furlong, who signed the report of the committee?

The Speaker: I think Dr. Umphrey asked for recognition first. Dr. Umphrey, do you wish to speak?

C. E. Umphrey, M.D.: Mr. Speaker, first I would like to answer your question. Do I wish to speak? No, but there are some things that have come up here that I think should be commented upon.

I would like to commend this committee, in the first place. How many of you—raise your hands—were at that committee investigation this afternoon? Well, seeing that a large number of you were not at that committee meeting, I will make a few remarks about the study of this committee.

In the first place, this House designated a study committee, and that study committee was to bring back recommendations on the disposal of the resolution that was submitted by Dr. Troost. The committee consisted of four, equally proponents and opponents of repeal.

Dr. Thorup was very honest when he entered that committee. He said, "I do not know what my final conclusions will be. I don't know whether I will be for repeal or not." I answered him to the effect that I didn't know, either, but that if evidence was uncovered that this basic science law should be repealed, I would be on his side of the fence. With that sort of a committee, an impartial investigation was begun.

From time to time our committee has given you the basis on which this investigation was begun. There have been comments to the effect that this committee has offered nothing constructive. I leave it to you. You have read the opinion of the committee; you have it in your hands.

As to the value of the committee, I would like to read from one of the reports of the committee meetings:

"Dr. Troost: Do you know of anything good about the basic science law?"

And his final answer was that if all the states had a basic science law, and it were the same law, then it would be an excellent law.

Now, we have suggested in our report that we send out questionnaires to the hospitals having a training program. We wanted to find out whether or not the amendments had any effect. Fifty per cent of the hospitals reported that they did have more ease in obtaining residents and interns.

Then we said that we felt that those amendments—trying to be conservative—had improved the law 25 per cent. At this time I wish to commend that committee that previously investigated the basic science law and offered the amendments that it did. I think it did a good job.

Now, the committee has suggested that many amendments must be made to this law, and that the law must in some way be made universal. It's a big job, but the majority of that committee feels that this can be done. The members of the committee do not feel that it must be regarded as hopeless.

As doctors of medicine, we must remember that we have a responsibility not only to the people of this state but to the people of the country. We must regard that position very seriously. And if we do not have this law, then we certainly are going to be charged with some law.

Tonight you have heard a great many statistics, and it was only in the opinion of those who gave the statistics that they did reflect this law, and that doctors were not coming in here, in their opinion, because of the basic science law. That was their opinion; there is nothing to prove it.

At one time the chairman of the committee was forced to say, "Gentlemen, you remind me of a world traveler who had statistics on everything, wherever he went. He came to a river, and he had statistics to prove that the average depth was only two feet, but he drowned when he tried to go over it." Eventually, if you want to quote statistics, you can drown yourself.

Now, the committee has offered you something constructive and something to work on in the future that is really constructive, and I hope that some of our younger men will get their teeth into this and really go to town.

I discussed it at length because a great many of you did not have a chance to go in to the committee meeting and discuss it.

In my brief case in this hotel I have replies from about forty hospitals. I have the replies that Dr. Troost had in his particular part of the work. I have replies from the different state organizations that have basic science laws, and from the boards of registration in those states, and they are predominantly in favor of their basic science laws, and would resist any move to have them repealed. A law that is spoken of as favorably by a number of states as that cannot be all bad.

The various other states are covered by other types of laws.

We have said in our report that we feel that a composite board would function better than our multiple board in this state. There are many criticisms that we have of this law, and we want them corrected. We want the study continued, and I think this House has had enough discussion on this, and surely, you've had enough information so that you can reach a conclusion very soon.

Thank you, Mr. Speaker.

Grover C. Penberthy, M.D. (Wayne): Mr. Speaker, and members of the House of Delegates: Two years ago I participated in a heated discussion about this basic science law, and the repeal of the law, and I stand with the committee report.

Dr. Christian has given you a little history of the background. Dr. Cook has referred to his participation. We have a law, and we feel—many of us, at least—that it should not be repealed.

I think Dr. Troost is to be commended for his interest and his contributions to the study. However, he has stated that since 1950 fewer doctors have come into the State of Michigan, and, as Dr. Umphrey has referred to statistics, it is difficult to prove that.

The thought that we are in a police action and have been since 1950 apparently has not entered into the thinking of this group about the doctors who have not been admitted to practice. The armed forces have taken many in the last two years, since 1950.

The hour is late, and I just wish to commend the committee report, as an individual and a delegate, and to support the action taken by the committee. I am sure that we can improve upon the act. Many of us realize that there are weak points. Let us get together and try to improve, rather than have others do it for us, as Dr. Christian says. We can do it, and we will do it.

Thank you. (*Applause*)

The Speaker: Is there other discussion?

Edgar G. Cochrane, M.D. (Wayne): Mr. Chairman and delegates, I feel rather humble getting up here with

all these famous men who have been before you. On the other hand, I think we should be considering two things.

We are interested, it seems, in finding out why we don't have more doctors in Michigan, but every time we reach out for that answer, it ties us back to this basic science law, as though everything hinged on the basic science law. I would say, gentlemen, that we have here, tonight, the basic science law, and that does not answer all the questions of why we do not have more doctors in Michigan.

All the students who graduate from Wayne and the University of Michigan do not intend—and never did intend—to stay in Michigan, regardless of what examinations they take. Another question is, "Why don't some of them stay here who intend to stay here?" Isn't it the people in Michigan? You may find out that Michigan doesn't appeal to people. It isn't that they want to come in; it doesn't appeal to them.

You may find out, too, that hospital doors are closed. Do you know that a lot of June graduates will only go to a hospital if they can get privileges, and if they don't get privileges, they'll go elsewhere? And that's quite often out of the state.

I think if we consider this basic science law as the law that it is meant to be, and leave it that way, we will approve of the report as given. However, if we are interested in finding out why we don't have more doctors, or if we are interested in finding out how we can get more doctors, let's have another committee investigate that, and come up with statements as to why, from definite sources. (*Applause*)

THE SPEAKER: Is there other discussion?

R. S. BREAKEY, M.D. (Ingham): I have been very close to this for years.

I want to tell the House some things that happened in my own home, and I don't think that belongs on the record.

(Discussion off the record.)

THE SPEAKER: Doctor, you have ten minutes to talk. If you will confine your remarks to the question?

R. S. BREAKEY, M.D.: I stand here to tell you in what great respect Dr. Troost is held in his home community. Many of us disagree with what Dr. Troost may have thought, but he has served on the State Board of Registration, and he has received no subsidy for his inquiries. He is truly a family doctor, and if his name is ever submitted—and I hope he lives long enough so it will be—he should be so honored by this organization. I cannot even think of any implication, direct or indirect, by any member of this Society against Dr. Troost, and I will believe in what he thinks he is going to do. On most of these things I agree with him.

He is not a big city doctor. He lives in the little town of Holt, Michigan. He has no ax to grind when he says we need more doctors.

I want to stand before you and tell you that Dr. Troost, who had nothing but the interests of medicine at heart—whether it be in discord with your own ideas—has been castigated and abused unjustly. And this, Mr. Speaker, I sure want on the record. He has been abused outside of the House. He has been criticized by the Council, in the publications of the Michigan State Medical Society. There was even a retraction required.

I do not want you, in handling my affairs as a doctor, to disregard the fine qualities of the man who had tears in his eyes when he was talking to you, because he believed what he said.

THE SPEAKER: Is there other discussion?

E. D. SPALDING, M.D.: May we hear from Dr. Furlong, who signed the report of the committee?

HAROLD A. FURLONG, M.D. (Oakland): Mr. Speaker, members of the House of Delegates: When I was appointed to this committee last spring, it was intimated to me that I was appointed because I was one of the men who might be against repeal, that the committee was to be composed of men who were for repeal and men who were opposed to repeal. I must confess that when I began to study this question, it was my considered opinion at that time—and it is still now—that we are not in a position at the present time to advocate repeal of this law, for the simple reason that there are so many ramifications, there is so much misunderstanding about what the situation is with regard to the number of doctors available.

It seems to me that in the short time that this committee had to work, and with the time at our disposal, we could not thoroughly evaluate this law. We were not asked to do that. We were asked by the mandate passed by the House of Delegates to study the basic science law and the effect of the 1952 amendments that were passed.

We have not had any opportunity to evaluate the amendments that were passed by the last Legislature. We don't know what effect that is going to have upon the law.

Not until the amendments were passed in the recent Legislature were the records of the basic science committee made available for public inspection. They are now available, and must be deposited in the office of the Secretary of State.

You have heard several men here this evening say they have tried in past years to obtain information about what was going on, from some of the reports of the committee, and they have not been able to obtain that information.

Now, I resent deeply the remarks that were made by a man for whom I have the greatest respect. I think Dr. Christian left the idea that in some way we were sort of feeble-minded and wishful thinkers, and that we didn't have guts enough to stand up and oppose those who were in favor of repeal, or that we didn't have intelligence enough to make any decent suggestions to this House that would point the direction in which we should take our action.

In my opinion, the most intelligent thing we could do as members of this committee was to recommend to the House of Delegates that this matter not be dropped now, but that we continue our effort, to continue the basic science law and amend it where necessary. Every member of that committee is agreed that the law as it now stands needs further revision, and I stand by that.

I abstained from voting this afternoon because I was a member of the study committee. The first question I was asked when I came to Grand Rapids to attend this meeting of the House of Delegates was how I, as a member of this study committee, could be expected to act on the committee to which the report would be referred. For that reason I abstained from voting.

It is my opinion that this matter of citing statistics ad infinitum about the per capita ratio of doctors to population is sheer bunk. That doesn't mean anything. It doesn't mean anything because the matter of quoting the number of doctors per capita started back twenty-five or thirty years ago, and it disregards entirely what has happened in the technical advances that have been made available to the practice of medicine in the last twenty-five years.

If every doctor today had to practice medicine the way medicine was practiced twenty-five years ago, we certainly would have a shortage of doctors. The same things apply to medicine that apply to the technical advances made in any branch of endeavor of the human race today. We use more machines more effectively with the men who work on them, to produce greater amounts of materials. One doctor today can take care of four times as many patients as he could twenty-five years ago, and I know that to be true in my own case. I'm an obstetrician, and I am delivering four or five times as many babies as I delivered twenty-five years ago, and I'm doing it more easily, with more safety to the mothers and to the infants themselves, because science, medical research has placed at my disposal implements that make it easier for me to practice. And

that applies to every man in the practice of medicine today.

So far as talking about the shortage of doctors is concerned, I think that's all bosh. And I don't think that the basic science law is keeping very many doctors who really want to come to Michigan out of the state, no matter what legislation you have, no matter what examination the man has to take. If he wants to go to Florida to practice medicine, and if he wants to go badly enough, he'll take all the examinations necessary to go there, and if he wants to come to Michigan, really, he'll take the examinations.

You say, "What are you fellows doing down there? Were you just playing?" The first thing we wanted to know was what the medical societies in the states that have basic science laws think about their basic science laws. Our chairman told you they were not in favor of repealing them; they don't want to stop dead in their tracks and go back twenty-five years; they are looking ahead.

And that is all that we are asking and recommending, that this House of Delegates do that. We are faced with just two things, and this has been brought out before this evening. We can either repeal the thing and stop dead, and then go around in circles, trying to find out something that will keep the untrained cultist from practicing in Michigan, someone who failed the basic science examination, or we can amend it.

Take the chiropractors and the naturopaths—their rate of failure is 65 per cent. Now, that is right there in *The Journal AMA*. In the twenty-two states that have a basic science law, the rate of failure is 65 per cent among those who are untrained in basic sciences. Isn't that what we need to keep in mind? It was to keep out the untrained man.

Michigan is not going to stop in its tracks—

THE SPEAKER: One minute, Doctor.

HAROLD A. FURLONG, M.D.: We have two things before this House, and one of the amazing things that came to me in this study committee—and I am very proud to have had the privilege of being on the committee—was this: Any basic science law in the future is not going to keep osteopaths out of Michigan, for the simple reason that there are only six schools of osteopathy left in the United States, and one of the members of the committee which goes about the country approving medical schools told us that there are no more Class A, B or C medical schools, but they are all either approved or not approved, and the six osteopathic schools that exist today could be approved as medical schools if they had a few more doctors on their faculties.

R. WALLACE TEED, M.D.: Mr. Speaker, I do not want to overburden you with words, but I have noticed that most of the remarks that have been made this evening have been personal opinions.

I would like to report that one week ago I met with the Executive Council of the Washtenaw County Medical Society which passed a resolution to the effect that they supported the majority report of this committee. That was not binding on the delegates, but merely for their guidance. However, it would be interesting to know if other county societies had taken similar action.

THE SPEAKER: I don't know that this needs any explanation.

With regard to the voting of the two members on the committee, the chairman appoints those committees, and he appointed those men purposely, believing that this subject you are now discussing would be perhaps the most controversial thing before you at this House of Delegates meeting. He appointed, purposely, one man presumably from each side of the question as originally explained, feeling that they would be informative to the committee, and it turned out exactly as I thought, that five men on the seven-man committee would render an opinion, and the other two would furnish what information they had, and probably would refrain from voting. If they had voted, presumably they would have cancelled each other's votes if they disagreed. The men on the committee need not apologize, for any mistake they made was mine.

Is there other discussion?

EARL F. LUTZ, M.D. (Wayne): Mr. Speaker, we have heard several general statements about reciprocity, but with how many states do we actually have reciprocity as far as our basic science law is concerned? Can anyone here answer that? I think you've got three—isn't that right? And with the amendment that occurred in 1952, how many more did that make with which we could possibly obtain reciprocity? Has that improved that situation?

Those are merely questions that I would like to have answered, and I think that has to be the objective, and not to pass it to the AMA, but to try to conform with the regulations.

I understand there are something like twenty-one states that have basic science laws with which we might be able to work out some form of reciprocity, and I think that has to be the main objective, rather than merely passing the buck.

I am not in favor of repealing the basic science law, but I do think that our efforts must be devoted to trying to conform with the basic science laws that are put up by the other states, so that we can have reciprocity.

THE SPEAKER: Dr. Beck?

OTTO O. BECK, M.D.: I did not have anything to do about the enacting of this law, but I was in the gallery of the House when it was passed. We were told at the time that the object of the basic science bill was to raise the standards of our substandard practitioners.

I was very much surprised to hear Dr. Troost state that eleven out of fourteen chiropractors passed the basic science board. At the time we did not feel that any chiropractor could pass the basic science examination, and that probably only a few osteopaths could.

A few months ago I had a conversation with an osteopath. I asked him what effect the osteopaths had noticed from the provisions of the basic science law, and he told me that it hadn't affected them at all.

Now it seems to me that the medical profession—which we thought would have an easy time passing the basic science bill—is the one doing the crying. The osteopaths are perfectly willing to abide by the law and to take the basic science examination, without trouble.

If the law were repealed, I could see that there would be a possibility of possibly some other kind of practice, a new practice of medicine could spring up without as much restriction as it has now with the basic science law.

We have now brought the standards of the osteopaths and chiropractors up, and at the time of the introduction of the bill, that was the main object of the medical profession. Now it had probably better keep it, in order to keep some other types of practice from springing up, as they did, not very long ago.

DONALD W. THORUP, M.D. (Berrien): I am the only member of this controversial committee who hasn't said something so far. There is a disadvantage to waiting to the end to speak, because then everyone else has said what you are going to say.

Somebody remarked at the committee hearing this afternoon that the work on this problem was just like trying to walk in a bog—every step you took, you found you were more deeply immersed—and that is certainly true.

There have been a lot of statistics tossed around in this discussion, and just as an example of what can happen when you start thinking about statistics and talking about them, Dr. Troost said tonight that 28 per cent of the chiropractors who took the examination in the last two examinations failed. Now, that wasn't the way Dr. Troost said it, but that's what it adds up to. Now, I think it's worth while to the people of the State of Michigan if twenty-five unqualified chiropractors failed the basic science examination.

Another statement that was made was that of osteopaths going to basic science states. That may be true. There may be lots of osteopaths in basic science states, and Michigan is no exception, certainly. However, California, Missouri and Pennsylvania are the three states with the most osteopaths of any states in the country, and none of them are basic science states. That is what happens when you start messing with these statistics.

Another statement that has been made is that since all the members of the committee admit that the law has been a failure, there is no object in retaining it. I think we have to decide what we mean by a failure when we speak of the law being a failure. If we mean that it has not kept out osteopaths or chiropractors, certainly it has not performed that function, but does that constitute failure of the law?

The other things that I have to say are repetitious, pretty much, of the things that have been said just recently.

I am in wholehearted agreement with Dr. Walker. My position on this committee was quite equivalent. I was placed on this committee because I submitted a resolution (which was handed me by my county society last year) asking for a change, not repeal but a change in the basic science law. That resolution did not necessarily represent my own personal feeling in the matter. I had the choice, I suppose, of resigning as a delegate to this convention if I didn't want to present the resolution. Since I presented the resolution, I was placed on this committee as an advocate of repeal of the basic science law. I accepted the position because I felt that I could objectively consider the evidence. Whether I have or not, I am still not in a position to decide, but I have formed certain conclusions, and I think that when we consider whether or not this law is a failure, we must consider what this law was designed to do.

I trust that the laws in our state and in all the basic science states are designed to improve the care of the people in those states, and it is my confirmed opinion that we should be steadfast in our adherence to the principle that preparation in the basic sciences is a necessary prerequisite to the practice of any of the healing arts. I don't know of any other method of finding out whether a chiropractor or a naturopath knows anything about anatomy, physiology or pathology, to name just three, other than by the basic science laws, the basic science examinations.

Furthermore, it is my opinion that the basic science laws have resulted—as Dr. Beck just said—in elevating the standards of education in the other schools of practice. I think that is notably true in the osteopathic schools.

In 1942 osteopaths had a passing rate of 55.4 per cent, and if you all followed the injunction sent you, and read the article in the June 20 issue of *The Journal AMA,* you have these figures. In 1942, osteopaths had a passing rate of 55 per cent in basic science examinations, and by 1952 they had a passing rate of 84.5 per cent—which, by the way, is only about 2.5 per cent behind doctors of medicine.

Furthermore, in contradistinction to this, the unqualified and unprepared have been prevented from practicing as indicated by a 66 per cent failure rate among chiropractors.

Furthermore, in contradictinction to this, the unqualiexaminations do not keep doctors from going to any location where they may want to go. I think if a man is going to want to locate in a place where there is a basic science law, he will go there, and my reason for saying that is based on some of the things we have learned during this last year. A questionnaire, as mentioned, was sent to Wayne University graduates. Out of 205 sent out, 153 replied, which I thought was quite an amazing return. Of those 153, only three indicated that the basic science law had anything to do with their decision about a location.

As I studied those replies to that questionnaire, I had the feeling that those recent graduates—they were men who graduated between 1940 and 1950—considered the basic science examination no more than a minor inconvenience. They were not in any way affected by the basic science law.

Secondly, the replies from state medical societies do not indicate that basic science examinations constitute a serious obstacle to entering practice in any of the states, with only a very few differences. Actually, twelve state medical societies of the twenty that have basic science examinations said that they constituted no deterrent to M.D.'s. The other seven who replied qualified their statements by saying that in some measure it did, and they made qualifications as to older doctors and other qualifications.

Thirdly—and this, again, is what statistics can do for you—among the states having more than the national average number of doctors (that is, more than one doctor for every 990-odd people) of which there are fourteen, five of those states are basic science states. There are twenty basic science states. This includes the District of Columbia. That is twenty out of a total of forty-nine states and the District of Columbia that have basic science laws, and this ratio of five out of fourteen that have better than average numbers of doctors, numbers of doctors per patient, is better than the average of twenty out of forty-nine.

Those are my reasons. That is my thinking. That is why my signature appears on the report of the committee.

THE SPEAKER: Is there other discussion?

LEON M. BOGART, M.D. (Genesee): I have been listening very intently to the discussion. It seemed to me that I was one of the delegates at whom these discussions were directed.

There seem to be two very definite schools of thought —one for repeal and one for retention with some amendments.

While I was listening to the intensely studied reports, and the intensely presented reports, I thought to myself, "What would happen if, all of a sudden, we would repeal our traffic laws just because a light here or there seemed to fail to direct traffic?" I was just wondering what would happen if you would repeal police laws. What would happen if, all of a sudden, you take the notion that, because the Constitution of the United States had not solved all of the problems of humanity, you should go and repeal it, throw it in a basket? You can find examples of that type across the water.

I do not feel that the basic science law has solved or will solve all of our ills about the shortage of doctors. I feel there are a good many other reasons why some doctors don't care to stay in Michigan.

We are living in a time of great fluctuations all over the world. We have masses of people who change from one location to another. In fact, it is so easy to change from one place to another that it makes people who have lived in Michigan for a steady period go other places.

If we repeal this act, I think we will go back, and as an ordinary delegate, listening very intently to your arguments, I feel that the basic science law has accomplished a great deal. Perhaps it can accomplish something more by some amendments. The human mind doesn't produce an article of perfection every time it produces one, but you shouldn't throw away that which it has, because it isn't perfect.

THE SPEAKER: The question is called for. Are you ready for the question? Do you know what the motion was? All in favor, say "aye"; opposed, "no." The motion is carried.

Dr. Weston, do you have a further report?

XIII—d (5) REPORT OF BEAUMONT MEMORIAL COMMITTEE AND SUBCOMMITTEES

C. L. Weston, M.D.: The report of the **Beaumont Memorial Restoration Committee,** as contained on page 128 in the handbook, was accepted as written. This Committee has also done a great deal of work and accomplished much toward the final completion of the Beaumont Memorial.

XIII—d (6). REPORT OF SCIENTIFIC RADIO COMMITTEE

The report of the **Scientific Radio Committee** is found on page 128 in the handbook. This Committee has done excellent work, also, and a continuation of that work is urged. The Reference Committee recommends adoption of this report as written.

XIII—d (7). REPORT OF ADVISORY COMMITTEE TO WOMAN'S AUXILIARY

The report of the **Advisory Committee to the Woman's Auxiliary on page 129** was accepted as written.

XIII—d (8). REPORT OF ADVISORY COMMITTEE TO MSMAS

The Reference Committee also recommends the adoption of the report of the **Advisory Committee to the Michigan State Medical Assistants Society,** printed on page 129. The Committee also urges that further efforts be made along the lines of assisting this group.

XIII—d (9). REPORT OF ADVISORY COMMITTEE TO NATIONAL FOUNDATION FOR INFANTILE PARALYSIS

The report of the **Advisory Committee to the National Foundation for Infantile Paralysis** is found on page 130 of the handbook. The Committee requests that for the reasons mentioned the Committee be dissolved. The Reference Committee recommends the adoption of the report of this Committee.

Mr. Speaker, I recommend the adoption of the report of this Reference Committee as amended.

The Speaker: You have heard the motion. Is there a second?

J. H. Schlemer, M.D.: Second the motion.

The Speaker: Any discussion? All in favor, say "aye"; opposed, "no." The motion is carried.

(Dr. Livesay, Vice Speaker, assumed the chair.)

XIII—e. REFERENCE COMMITTEE ON CONSTITUTION AND BY-LAWS

J. E. Livesay, M.D.: The next order of business is the report of the Reference Committee on Constitution and By-Laws.

Sherman L. Loupee, M.D. (Cass): This is the report of the Reference Committee on Constitution and By-Laws.

Your Committee on Constitution and By-Laws met with five of the six members present and voting, with a report as follows.

Now, in order to follow this, if you will turn to page 157 of your handbook, you can see what we propose to you.

XIII—e (1). RESOLUTION RE ASSOCIATE MEMBERSHIP FOR VA PHYSICIANS

The first proposal is to amend Chapter 5, Section 3 e of the By-Laws, adding after "public health service" the words, "or physicians employed by the Veterans Administration." We think that this simple addition will take care of the request of the doctors from Calhoun County with reference to the qualifications or admission to practice of those who are in the state temporarily.

Again, we propose to amend the final paragraph of section 3, line 5, by changing the word "he" to "and."

Again, in line 7, change "an" to "any," so it reads, starting with the second sentence, "An Associate member shall not pay dues to this State Society, and (except for those inactive because of protracted illness, or those in the armed services, that is, Army, Navy and Air Force, who have the right to vote and hold office) they shall not have the right to vote or hold office in either component county or State Society. Component county societies may require any associate member to pay certain local dues."

XIII—e (2). REPORT OF HOUSE OF DELEGATES COMMITTEE ON CONSTITUTION AND BY-LAWS

Again, amend Section 4 on the subject of "Retired Member." In the last line, delete the word "not" and change "or" to "and."

Again, we propose to amend Section 5 by deleting this section entirely, as such membership is merged in the life membership.

Again, we propose to amend Section 7, "Life Membership," to read, "A doctor of medicine who has attained the age of 70 years, or has been in practice for 50 years, and has maintained an active membership in good standing for 25 years in any constituent state society with dues paid for the previous calendar year may——."

Again, we amend Section 10, line 3, changing the word "meeting" to "Session."

Mr. Chairman, I move the adoption of this report.

J. E. Livesay, M.D.: Thank you, Dr. Loupee.

It is inherent in the Constitution and By-Laws that any amendment to the By-Laws must lay over one meeting of this session of the House of Delegates. This therefore becomes an item of unfinished business at a subsequent meeting of this House this year.

Sherman L. Loupee, M.D.: I have reported on the portion of the work of the committee which we request be adopted. There is still another action which should be reported. We had three resolutions in all. We have taken care of two.

XIII—e (3). RESOLUTION RE DUES FOR YOUNGER MEMBERS

The third resolution was presented by Dr. Babcock of Detroit. It referred to the reduction of local fees and state fees to new members of the profession for the first and second year. The committee considered the resolution, and approved a "no action" process. That is, they took no action that would determine one way or another at the present time. It would still be ineffective.

I so move.

J. E. Livesay, M.D.: Is there a second to the motion that no action be taken on this matter? Do you remember the resolution?

J. H. Schlemer, M.D.: I second it.

(The motion was put to a vote, and carried.)

XIII—f. REPORT OF REFERENCE COMMITTEE ON RESOLUTIONS

Ralph A. Johnson, M.D. (Wayne):

XIII—f (1). RESOLUTION RE MSMAS

The first resolution is as follows:

WHEREAS, The Michigan State Medical Assistants' Society, organized in 1950, has grown modestly; and

WHEREAS, This organization has proved to be of valuable assistance to medicine, professionally and public relations-wise; and

WHEREAS, There are requests for information about the Medical Assistants Societies from organizations outside the state; now therefore be it

RESOLVED, That the Michigan State Medical Society, through its Public Relations Committee, aid in preparing a pamphlet to outline the history, objectives

and other pertinent information about the Michigan State Medical Assistants' Society; and be it further

RESOLVED, That the Michigan State Medical Society endorse the establishment of courses for education of medical assistants in the colleges throughout the State of Michigan.

Your reference committee approves of this resolution, but has the additional recommendation that The Council be asked to survey the training programs of these schools with the objective of seeking to improve and facilitate these courses.

Mr. Speaker, I move the adoption of this portion of the report.

J. E. Livesay, M.D.: Is there a second?

G. Thomas McKean, M.D.: Second the motion.

J. E. Livesay, M.D.: Is there discussion?

(The motion was put to a vote, and carried.)

XIII—f (2). RESOLUTION RE CLINE (AMA) REPORT

The next resolution was introduced by Dr. Rodger of Northern Michigan Medical Society. The resolution is important. I will read it.

WHEREAS, The AMA Committee for the Study of Relations Between Osteopathy and Medicine made certain recommendations to be acted upon at the June 1954 session of the House of Delegates of the AMA, these recommendations being as follows:

(1) That the House of Delegates declare so little of the original concept of osteopathy remains that it does not classify medicine as currently taught in schools of osteopathy as the teaching of "cultist" healing.

(2) That the House of Delegates state that pursuant to the objectives and responsibilities of the American Medical Association, which are to improve the health and medical care of the American people, it is to the policy of the Association to encourage improvement in undergraduate and postgraduate education of doctors of osteopathy.

(3) That the House of Delegates declare that the relationship of doctors of medicine to doctors of osteopathy is a matter for determination by the state medical associations of the several states, and that the state associations be requested to accept this responsibility.

(4) That the AMA Committee for the Study of the Relations Between Osteopathy and Medicine, or a similar committee, be established as a continuing body.

And WHEREAS, While this report was made to the June 1953 meeting of the AMA House of Delegates, both the Board of Trustees and the House of Delegates recommended that action on the report be deferred until June 1954 so that state associations would have opportunity to express their opinions; therefore be it

RESOLVED, That the House of Delegates of the Michigan State Medical Society recommends to the House of Delegates of the American Medical Association that the above recommendations of the Committee for the Study of Relations between Osteopathy and Medicine be adopted.

Your committee looks with favor upon this resolution, and recommends its adoption by the House. I move the acceptance of this portion of the report.

J. E. Livesay, M.D.: You have heard the motion. Is there a second?

R. Wallace Teed, M.D.: I second the motion.

* * *

O. J. Johnson, M.D. (Bay): I would make a substitute motion that we vote on these four recommendations individually.

E. D. Spalding, M.D.: I would second the motion.

J. E. Livesay, M.D.: It has been moved and seconded that we consider these items individually.

(The motion was put to a vote, and carried.)

(The meeting adjourned at 12:20 a.m.)

TUESDAY MORNING SESSION

September 22, 1953

The Fourth Meeting convened at nine forty-five o'clock, the Speaker, Dr. Baker, presiding.

John R. Rodger, M.D.: Mr. Speaker, I move that the House of Delegates of the Michigan State Medical Society go on record as disapproving the wording of Recommendation 1 as written, substituting for it the following: "That the House of Delegates of the AMA declare so little of the original concept of osteopathy remains as currently taught in osteopathic schools that doctors of medicine may be permitted to teach in osteopathic schools without the stigma of unethical conduct."

Dr. Baker: Thank you.

The Speaker: All in favor of this motion as Dr. Rodger has presented, say "aye"; opposed, "no." The motion is carried, and that report from the reference committee as amended has now been passed in all of its details.

XIII—f (3). RE PUBLIC RELATIONS FUNDS

Ralph A. Johnson, M.D.: Mr. Speaker, the next resolution was introduced by Dr. Fenton of Wayne. The resolution reads:

WHEREAS, The urgency for the Michigan State Medical Society special dues of $20 yearly for public relations has lessened; and

WHEREAS, The real core of good public relations is individual physician-patient relationship; and

WHEREAS, Improvement in service to the public can frequently be performed better by county societies than the state organization; therefore be it

RESOLVED, That any county society wishing to carry on local public relations in the way of a service program or other acceptable means may request of the Michigan State Medical Society fund allocated for such purposes in an amount not to exceed one-half of the amount paid in by such counties for this purpose. The decision on the granting of each request shall rest with The Council of the Michigan State Medical Society.

The principle contained in this resolution is referred to The Council of the Michigan State Medical Society for study and such action as they may deem advisable.

Your Reference Committee unanimously commends The Council on what we consider to have been the wise and judicious expenditure of our dues.

Mr. Speaker, I move the adoption of this portion of the report.

The Speaker: Is there a second?

(The motion was regularly seconded, was put to a vote, and carried.)

The Speaker: The motion is carried.

XIII—f (4). RESOLUTION RE ACS

Ralph A. Johnson, M.D.: A resolution was introduced by Dr. Long of Wayne County which had to do with the recent directive by the Board of Regents of the American College of Surgeons which was sent to the administrators of presumably all of the accredited hospitals in Wayne County, which had to do with aspects of fee-splitting. Your Reference Committee strongly believes that there are legal connotations inherent in this resolution.

Your Chairman learns with sorrow that Mr. J. Joseph Herbert, our Legal Counsel, is ill and unable to attend this meeting. Had he been here, he might have helped your Reference Committee to bring out a report for action by this House at this session.

It is the recommendation of the Committee that this resolution be referred to our Legal Counsel for his opinion and recommendations. It is the wish of the Committee that if any action should be taken upon his

recommendation, that this be done by The Council of the Michigan State Medical Society.

Mr. Speaker, I move the adoption of this portion of the report.

R. W. Teed, M.D.: Second the motion.

(The motion was put to a vote, and carried.)

Ralph A. Johnson, M.D.: Mr. Speaker, I move the adoption of the report as a whole, as amended.

William S. Reveno, M.D. (Wayne): Second the motion.

(The motion was put to a vote, and carried.)

The Speaker: The motion is carried.

XV. MESSAGE TO LEGAL COUNSEL, J. JOSEPH HERBERT

William L. Brosius, M.D.: Would it be in order to make a motion to send a word of some type of greeting to Mr. Herbert? Everyone here knows him, and knows what he means to the Michigan State Medical Society.

I make a motion that the Secretary be delegated to send some fitting remark or a short, brief note to Mr. Herbert, expressing our concern, and telling him that we miss him at this meeting.

Ralph A. Johnson, M.D.: Second it.

(The motion was put to a vote, and carried.)

The Secretary: The motion is carried, and the Secretary is so instructed.

XIII—g. ON SPECIAL MEMBERSHIPS

The next item of business is the report of the Reference Committee on Special Memberships, by Dr. DeBoer.

Your Committee on Special Memberships has carefully examined the resolutions introduced by the various county societies and the certification by the State Society office of the following applications for special memberships and recommends their approval.

Associate Members.—Vernon B. Astler, M.D., Ann Arbor.

Robert W. Bailey, M.D., Ann Arbor; Winston C. Baird, M.D., Flint; Norman L. Banghart, M.D., Ann Arbor; Wm. I. Bauer, M.D., East Lansing; Melvin H. Becker, M.D., Ann Arbor; Flora Benka, M.D., Ann Arbor; Damon P. Beyer, M.D., Clio; George E. Block, M.D., Joliet, Ill.; Ralph G. Bonfiglio, M.D., Ann Arbor; Milton F. Bryant, Jr., M.D., Ann Arbor.

F. Paul Campbell, M.D., Ann Arbor; Joshua H. Carey, M.D., Ann Arbor; A. A. Cintron-Rivera, M.D., Ann Arbor; Glenn T. Clements, M.D., Ann Arbor; Hodge N. Crabtree, M.D., Ann Arbor; Thomas N. Cross, M.D., Ann Arbor; Frank W. Crowe, M.D., Ann Arbor.

C. Wallace Dalley, M.D., Weaver, S. D.; Edward W. Dennis, M.D., Ann Arbor; Cleveland R. Denton, M.D., Cincinnati, Ohio; John H. DeTar, M.D., New Haven, Conn.; Robert P. Dobbie, Jr., M.D., Ann Arbor; Owen W. Doyle, M.D., Washington, D. C.

Robert M. Edwards, M.D., Seattle, Washington; David C. English, M.D., Ann Arbor; Philip Erlich, M.D., Brooklyn, N. Y.

Joseph Fischoff, M.D. (Washtenaw County); C. Thomas Flotte, M.D., Ann Arbor; Gordon R. Forrer, M.D., San Antonio, Texas; Daniel P. Foster, M.D., Detroit; Robert Fry, M.D., Euclid, Ohio.

J. Mitchel Gaffney, M.D., Detroit; Robert J. Gaukler, M.D., Ann Arbor; Wayne W. Glas, M.D., San Francisco, Calif.; Raymond W. Goldblum, M.D., Ann Arbor; Richard D. Goldner, M.D., Ypsilanti; Clayton H. Gordon, M.D., Birmingham; John R. G. Gosling, M.D., Ann Arbor; Stuart M. Gould, Jr., M.D., Ann Arbor; Robert L. Gullen, M.D., Litchfield Park, Ariz.

Wm. H. Havener, M.D., Ann Arbor; Norman S. Hayner, M.D., Ann Arbor; Willard J. Hendrickson, M.D., Ann Arbor; Robert C. Hendrix, M.D., Ann Arbor; Fred J. Hodges, III, M.D., Ann Arbor; Robert H. Hume, M.D., Ann Arbor; H. Ross Hume, Jr., M.D., Snyder, N. Y.; Daniel C. Hunter, Jr., M.D., Ann Arbor.

John C. Ivanoff, M.D., Ann Arbor.

Albert C. Jaslow, M.D., Ann Arbor; Robert D. Johnson, M.D., Ann Arbor; John L. Johnston, M.D., Detroit; Edna M. Jones, M.D., Detroit.

Artin D. Kantarjian, M.D., Ann Arbor; Theodore E. Keats, M.D. (Washtenaw County); Paul R. Kempf, Jr., M.D., Ann Arbor; Ralph O. Kennedy, M.D., Ann Arbor; John A. Kenney, Jr., M.D., Ann Arbor; F. O. Kirker, M.D., Detroit; Edward J. Klopp, M.D., Ann Arbor; George H. Koepke, M.D., Ann Arbor.

Donald J. Largo, M.D., Plymouth; Louis F. Lawrence, M.D., Camp Roberts, California; Lloyd J. Lemmen, M.D., Holland; Paul Levy, M.D., Chanute A.F.B., Ill.; James W. Linman, M.D., San Antonio, Texas; James B. Ludwig, M.D., Ironton, Minn.; Harold D. Lueken, M.D., Gellingham, Wash.; Robert M. Lugg, M.D., Ann Arbor.

James T. McGuckin, M.D., Ann Arbor; Josiah A. McHale, M.D., Roslindale, Mass.; Charles C. Mackinney, M.D., Philadelphia, Pa.; Kenneth R. Magee, M.D., Ann Arbor; James A. Maher, M.D., Ann Arbor; Alex Margulis, M.D., Ann Arbor; Stephen C. Mason, M.D., Ypsilanti; Robert A. McArthur, M.D., Detroit; Charlotte Mersky, M.D., Detroit; Robert E. Michmerhuizen, M.D., Warm Springs, Ga.; Wm. M. Mikkelsen, M.D., Ann Arbor; Robert E. Miller, M.D., Charlotte, N. D.; Russell F. Miller, M.D., Ann Arbor; Kenneth B. Moore, M.D., Pratt, Kansas; George W. Morley, M.D., Ann Arbor.

Tom E. Nesbitt, M.D., Ann Arbor; Lester I. Nienhuis, M.D., Hot Springs, Ark.; Charles L. Nord, M.D., Ann Arbor.

Donald C. Overy, M.D., Ann Arbor.

Gena Rose Pahucke, M.D., Ann Arbor; Theophilus S. Painter, Jr., M.D., Castle A.F.B., Calif.; Valentine Papadopulos, M.D., Ann Arbor; James B. Peery, M.D., Ann Arbor; R. A. Pinkham, M.D., Ann Arbor; Kenneth E. Pitts, M.D., Ypsilanti.

James R. Quinn, M.D., Pontiac.

Robert Rapp, M.D., Ann Arbor; E. Hobart Reed, M.D., Grosse Pte. Park; R. E. Reichert, Jr., M.D., Larkspur, Calif.; Ernest W. Reynolds, M.D., Ann Arbor; Robert M. Reynolds, M.D., Gary, Ind.; James H. Robinson, M.D., Detroit; Wm. Rottschaefer, M.D., Ann Arbor; Ralph W. Ryan, M.D., Morgantown, W. Va.

David A. Schane, M.D., Detroit; Holbrooke S. Seltzer, M.D., Ann Arbor; John M. Shaw, M.D. (Washtenaw County); W. Harvey Shipton M.D., Detroit; Roger F. Smith, M.D., Ypsilanti; Herbert H. Spencer, M.D., Pleasant Ridge; Henry K. Schoch, Jr., M.D., Ann Arbor; Wallace C. Stout, M.D., Ann Arbor; F. James Stubbart, M.D., Ann Arbor; Yuan-Mei Sun, M.D., Ann Arbor.

Robert F. Thompson, M.D., Ann Arbor; Donald F. Treat, M.D., Detroit; William O. Tschumy, M.D., Ann Arbor; Charles J. Tupper, M.D., Pleasanton, Calif.

David C. Valder, M.D., Ann Arbor.

R. G. Walton, M.D., Ann Arbor; Woodrow W. Weiss, M.D., Detroit; Gail H. Williams, M.D., Barnett, Mo.; Arnold Wollum, M.D., Annapolis, Md.; and Lance S. Wright, M.D., Detroit.

Retired Members.—Hugh M. Beebe, M.D., Ann Arbor; Karl B. Brucker, M.D., Lansing; Horace R. Cobb, M.D., Kalamazoo; Charles P. Drury, M.D., Marquette; Richard C. Lyle, M.D., Saginaw; W. H. Mast, M.D., Tecumseh; John A. Maurer, M.D., Saginaw; James E. Munro, M.D., Jackson; James J. O'Meara, M.D., Jackson; B. Morgan Parker, M.D., Utica; Wm. H. Pickett, M.D., Saginaw; Alan L. Richardson, M.D., Detroit; R. A. Springer, M.D., Centerville; and John O. Wetzel, M.D., St. Clair.

Life Members.—Raymond C. Andries, M.D., Detroit; Jesse L. Bender, M.D., Mass.; Henry R. Biggar, M.D., Flint; Eugene S. Browning, M.D., Grand Rapids; Ralph G. Cook, M.D., Kalamazoo; Thomas S. Davies, M.D., Detroit; A. James DeNike, M.D., Detroit; John C.

Dodds, M.D., Detroit; Donald H. Duffie, M.D., Central Lake; Bert U. Estabrook, M.D., Detroit; John E. Gleason, M.D., Detroit; George R. Goering, M.D., Flint; James L. Hammond, M.D., Detroit; George R. Hanke, M.D., Ransom; Thomas J. Heldt, M.D., Detroit; A. B. Hewes, M.D., Adrian; Wm. H. Honor, M.D., Detroit; Ralph S. Jiroch, M.D., Saginaw; Charles W. Knaggs, M.D., Detroit; C. E. Lockwood, M.D., Holly; O. G. MacFarland; M.D., N. Adams; Allan W. McDonald, M.D., Detroit; Guy M. McDowell, M.D., Bay City; Augustus J. O'Brien, M.D., Ironwood; Wm. R. Olmsted, M.D., Detroit; Calvin S. Purdy, M.D., Buckley; Floyd A. Roberts, M.D., Flint; Alvin H. Seibert, M.D., Detroit; Clarence E. Simpson, M.D., Detroit; E. K. Simpson, M.D., Pontiac; Arthur R. Smeck, M.D., Detroit; Claude A. Smith, M.D., Detroit; Alvin N. Thompson, M.D., Flint; Henry L. Ulbrich, M.D., Detroit; and Paul Van Riper, M.D., Champion.

Mr. Speaker, I move that this report be accepted by the House.

* * *

Your Committee also wishes to report that the following names have been certified by the office of the MSMS, but no resolution has been received from their local county society:

Retired Membership.—W. H. Mast, M.D., Lenawee; B. Morgan Parker, M.D., Macomb; Wm. A. Hagen, M.D., Muskegon; F. O. Kirker, M.D., Medical Society of North Central Counties; Richard C. Lyle, M.D., Saginaw; John O. Wetzel, M.D., St. Clair; and Hugh M. Beebe, M.D., Washtenaw.

Emeritus Membership.—F. A. Forney, M.D., North Central Counties.

Life Membership.—Augustus J. O'Brien, M.D., Gogebic; Guy Marshall McDowell, M.D., Livingston; C. E. Lockwood, M.D., Oakland; E. K. Simpson, M.D., Oakland; and Jesse L. Bender, M.D., Ontonagon.

The following names have been sent in by the local society, but have not been passed on by the State Society office—either because of lack of time or ignorance of procedure, and consequently these names are not recommended at this time for special memberships:

Retired Membership.—Charles Drury, M.D., Marquette; Alan L. Richardson, M.D., Wayne.

Life Membership.—Horace R. Cobb, M.D., Kalamazoo; Ralph G. Cook, M.D., Kalamazoo.

Respectfully submitted,
G. W. DeBoer, M.D., *Chairman*
P. H. Engle, M.D.
W. A. Lemire, M.D.
W. L. Brosius, M.D.
Paul Ivkovich, M.D.

Guy W. DeBoer, M.D.: I move the approval of the report as a whole.

E. D. Spalding, M.D.: Second the motion.

(The motion was put to a vote, and carried.)

XIII—h. REFERENCE COMMITTEE ON LEGISLATION AND PUBLIC RELATIONS

The Speaker: The next committee to report is the Reference Committee on Legislation and Public Relations, by Dr. Heidenreich.

XIII—h (1).

John R. Heidenreich, M.D. (Menominee): The first one has to do with teaching of medical ethics. It was introduced by Dr. Swift.

I move the adoption of this portion of the report.

(The motion was regularly seconded, was put to a vote, and carried.)

XIII—h (2). RESOLUTION RE VETERANS CARE

John R. Heidenreich, M.D.: The second resolution was introduced by Dr. Markley of Pontiac. It has to do with the AMA program regarding the hospitalization of veterans.

We went over this resolution, and thought we could probably rewrite the thing and clarify it, but the intent is the same. With your permission, I will read the resolution as we changed it:

WHEREAS, the American Medical Association, by recent action of its House of Delegates has recommended that the provision of medical care and hospitalization by the Veterans Administration be limited only to (1) veterans with diseases and disabilities which are service-incurred or aggravated, and (2) temporarily to wartime veterans suffering from tuberculosis or neuropsychiatric disorders of non-service-connected origin who are unable to pay the expense of necessary hospitalization; and

WHEREAS, the Michigan State Medical Society is of the opinion that the ultimate objective of the AMA is to develop better utilization of VA hospital facilities and to return those facilties to the use for which they were originally intended, namely, the care of the veteran suffering from disability or disease incurred during his period of service in the nation's armed forces; and

WHEREAS, the MSMS is in full accord with this ultimate objective and with the general principle that medical and hospital care for any citizen, rightfully is the responsibility of the individual and of his state or community, except veterans whose physical or mental state has been impaired by virtue of military service, and

WHEREAS, the rapid growth of the veteran population (now twenty million and increasing by one million each year) and lax policies with regard to VA hospital care could well lead the nation directly into full-scale government medicine; and

WHEREAS, the MSMS feels that any immediate campaign towards gaining this objective should be limited in its concept to the initial objective of eliminating abuses by means of the present laws and regulatons,

THEREFORE, BE IT RESOLVED, that the MSMS strongly urges the AMA, in implementing a campaign better to define the scope of the VA hospital program, to make no concerted attempt at this time to alter the intent of the law as passed by Congress, but rather to extend the efforts of the medical profession toward the initial objective of eliminating abuses.

John R. Heidenreich, M.D.: Mr. Speaker, I move the adoption of this portion of the report.

(The motion was regularly seconded, was put to a vote, and carried.)

XIII—h (3) RE REPORTING OF CANCER

John R. Heidenreich, M.D.: The third resolution we considered was introduced by Dr. Engelke. You heard the resolution yesterday. We did amend one portion of it. I will read the "resolve."

NOW THEREFORE BE IT RESOLVED, that the Michigan State Medical Society recommends that no change be made in the reporting requirements of the law at the present time; and be it further

RESOLVED, that this matter be referred to the proper committee.

Our reason for limiting the second "resolve" was that we were informed that a co-ordinating committee is in the process of being set up at the present time, and there is no need for another committee to be set up by The Council.

I move the adoption of this portion of the report.

The Speaker: Is there a second to that motion? Supported by Dr. Schlemer.

This was on the cancer question, I understand.

Is there any other discussion?

(The motion was put to a vote, and carried.)

JOHN R. HEIDENREICH, M.D.: Mr. Speaker, I move the adoption of the report as a whole.

J. H. SCHLEMER, M.D.: Second the motion.

(The motion was put to a vote, and carried.)

THE SPEAKER: The next committee to report is that on **Hygiene and Public Health,** by Dr. Engelke.

XIII—i. COMMITTEE ON HYGIENE AND PUBLIC HEALTH

XIII—i (1). RE WATER RESOURCES

O. K. ENGELKE, M.D.: The first resolution submitted to the Committee pertained to activities of the Water Resources Commission, with respect to pollution of state water. The committee felt the need for some research into this matter, and put off any recommendations to the House of Delegates until there is opportunity to do this research, and will have a subsequent meeting at this session.

Mr. Speaker, have you any notion when the committees will have an opportunity to meet again to take up new resolutions and to reconsider some that are pending?

THE SPEAKER: There will be an opportunity to meet again to take up new resolutions at the close of this morning's meeting—between now and tonight. That will be the last opportunity you will have.

O. K. ENGELKE, M.D.: This committee will then restudy the resolutions at the close of this meeting and bring back recommendations to the House at the meeting this evening.

XIII—i (2). REPORTING OF VENEREAL DISEASE FINDINGS

The second resolution submitted to the committee was one regarding the reporting of venereal disease findings. I would like to say that not only in the resolution which was just discussed, but in this one, we had the benefit of some counsel from people who are well informed on the subject of venereal disease reporting in all its aspects. Opportunity was given for free discussion.

The committee concluded that the resolution as introduced was satisfactory.

Mr. Chairman, I move the adoption of this resolution.

(The motion was regularly seconded, was put to a vote, and carried.)

XIII—i (3). RE STUDY OF MENTAL HEALTH PROBLEM

O. K. ENGELKE, M.D.: The third resolution considered by the committee pertains to the mental health study activities of the Michigan State Medical Society. It was introduced by Dr. J. F. Beer, who had an opportunity to present his point of view to the committee. After hearing Dr. Beer, and studying the resolution carefully, the committee decided it could be recommended to the House of Delegates in the form in which it was presented.

Mr. Speaker, I move the adoption of this resolution.

(The motion was regularly seconded, was put to a vote, and carried.)

O. K. ENGELKE, M.D.: We will give the balance of our report at the evening session.

XIII—J (1). RE MHS ADVISORY COMMITTEE

THE SPEAKER: The next reference committee report is that of the **Committee on Medical Service and Prepayment Insurance,** Dr. Markey.

JOSEPH P. MARKEY, M.D. (Saginaw): The Committee on Medical Service and Prepayment Insurance was presented with a resolution. The committee approved the resolution regarding the Advisory Committee of the Michigan Hospital Service unanimously.

I move the adoption of the report.

(The motion was regularly seconded, was put to a vote, and carried.)

XIII—K. MISCELLANEOUS BUSINESS

EDGAR A. BICKNELL, M.D. (Wayne): We had one item of business.

XIII—k (1). RE SOCIAL WELFARE REPORTS

A resolution was presented by Dr. Paul Engle of Eaton County. This is a resolution that deals with social welfare reports.

WHEREAS, Most physicians find it impossible to answer the questions required in the present Social Welfare forms without perjuring themselves; and

WHEREAS, The reporting of diagnosis to lay organizations is ethically questionable; and

WHEREAS, The refusal of physicians to complete the present forms often created undue hardship for the aged patient, and frequently creates ill feeling between the physician and his patient; therefore be it

RESOLVED, That the Michigan State Medical Society direct its efforts toward correcting this impossible situation.

The committee has approved this, and recommends its adoption.

(The motion was regularly seconded, was put to a vote, and carried.)

THE SPEAKER: I will ask the Vice Speaker to take the chair.

Any new resolutions?

IX—q. RE JOINT COMMITTEE FOR ACCREDITATION OF HOSPITALS

K. B. BABCOCK, M.D.:

WHEREAS, The interests of the medical profession and their patients are best served by the mutual cooperation of all divisions; and

WHEREAS, Specialized groups have the privilege of naming representatives to the Joint Commission for Accreditation of Hospitals; therefore be it

RESOLVED, That the Michigan State Medical Society requests its delegates to the American Medical Association to recommend that the American Academy of General Practice be accorded the same privilege, and that the Board of Trustees of the American Medical Association be requested to permit the American Academy of General Practice to name two of the six AMA representatives to the Joint Commission for Accreditation of Hospitals.

VICE SPEAKER: This resolution will be referred to the Reference Committee on Resolutions.

IX—r. RE AMENDMENTS TO BASIC SCIENCE ACT

D. W. THORUP, M.D.: I have a resolution to present, with the approval of the Special Study Committee on the Basic Science Law. This is a resolution to further amend the basic science law of the State of Michigan.

WHEREAS, The necessity of taking an examination in the Basic Sciences in some instances constitutes an apparently unnecessary expenditure of time, effort and money; and

WHEREAS, Evidence of having successfully passed such an examination is now and should be a prerequisite to licensure to practice any of the healing arts; and

WHEREAS, The purpose of this examination is to demonstrate satisfactory knowledge of these certain designated Basic Sciences; and

WHEREAS, Other and unimpeachable means are available by which a candidate may demonstrate his knowledge of these certain Basic Sciences; therefore be it

RESOLVED, That

1. The "BASIC SCIENCE LAW" be further amended as follows: Section 5. Any person desiring to practice

healing in this state shall make application to the board of examiners in the basic sciences for a certificate of eligibility to take the examinations therein, such application to be accompanied by a fee of $10.00, and the said board shall issue such a certificate upon the following conditions, viz.:

Each applicant shall show to the satisfaction of the board that he is of good moral character, and possesses a high school education or its equivalent; and in addition pass an examination before the board to its satisfaction in the following subjects: Anatomy, physiology, pathology, bacteriology and chemistry, with a grade of not less than 70% in each subject: Provided, that the board shall accept in lieu of this examination an affidavit presented by the candidate or applicant showing that he has successfully passed courses and examinations at a comparable level in these required subjects in a college or university approved by an authorized accrediting body, such affidavit to be signed by a suitable officer of said college or university, and that

2. The House of Delegates instruct its legislative committee to immediately proceed to prepare, with assistance from any qualified individual or group desirable, the necessary instrument to accomplish the above purpose and present it to the 1954 Legislature of the State of Michigan for action.

VICE SPEAKER: Inasmuch as this subject has been heard before in the Reference Committee on Special Committees, this new resolution will be referred to that same committee.

IX—s. RE MIGRATORY LABOR

DIRK C. BLOEMENDAAL, M.D. (Ottawa): This is a resolution regarding migratory labor.

WHEREAS, Dr. E. F. Sladek of Traverse City has given us a very comprehensive preliminary report on the problem of the migratory workers in Michigan; therefore be it

RESOLVED, That Dr. Sladek be asked to continue to further study this problem and report again next year; and be it further

RESOLVED: That two or three copies of this report by Dr. Sladek be sent to every county welfare unit in the State of Michigan.

VICE SPEAKER: This will be referred to the Reference Committee on Hygiene and Public Health.

Are there any more resolutions?

IX—t. RE LOWERING MSMS DUES

E. H. FENTON, M.D.:

WHEREAS, The urgency for the Michigan State Medical Society special dues of $20 yearly has lessened; and

WHEREAS, Better public relations can often be performed on the level of the county society; and

WHEREAS, It might be unwise to raise the total dues of county society members beyond their present rather high levels; and

WHEREAS, A reduction in state dues would allow county societies to raise their dues a proportionate amount with less concern; now therefore be it

RESOLVED, That the Michigan State Medical Society dues be reduced $10 yearly to allow the implementation of an increase in county society dues when justified.

VICE SPEAKER: That will be referred to the Reference Committee on Resolutions.

Are there any more new resolutions?

XIII—e (1 and 2). COMMITTEE ON CONSTITUTION AND BY-LAWS

Now, "Supplementary Reports of Reference Committees." It is now in order for the Committee on Constitution and By-Laws to resubmit its resolutions. Dr. Loupee?

S. L. LOUPEE, M.D.: As reported last evening, this resolution was complete, and a satisfactory number of copies have been made and placed on file with the clerk. Therefore, at this moment, having waited until the following session, I move the adoption of the committee report.

R. W. TEED, M.D.: Second the motion.

(The motion was put to a vote, and carried.)

XV—MISCELLANEOUS: INTRODUCTION OF SAMA DELEGATE—ALAN DAWSON

VICE SPEAKER: We have a distinguished guest this morning—Mr. Alan Dawson, of the Student AMA, University of Michigan. Will he step forward for a moment? He will soon be a doctor.

We welcome you, and praise the activities you have undertaken, and hope that the activities of this Student AMA will continue, because we believe it has a great deal of value.

Is there anything you wish to say?

ALAN DAWSON (University of Michigan Medical School): Mr. Speaker, I would like to thank you for the opportunity of attending this convention and observing your deliberations here. I want to assure you I am learning quite a bit from this delegation, and from my experiences here, which I will definitely take back to my chapter and to the national convention of our organization next June in Chicago.

Thank you very much.

VICE SPEAKER: We thank you for your presence here.

(Taking of television film.)

VICE SPEAKER: We are recessed.

(The meeting recessed at ten-fifty o'clock.)

TUESDAY EVENING SESSION

September 22, 1953

The Fifth Meeting convened at eight-twenty o'clock, the Speaker, Dr. Baker, presiding.

MICHIGAN'S FOREMOST FAMILY PHYSICIAN

(The audience arose and applauded as Dr. William J. Stapleton, Jr., Detroit, was escorted to the rostrum.)

THE SPEAKER: We have with us Dr. William J. Stapleton, Jr., whom we have elected the Foremost Physician of the Year. You heard a great deal about him in the review of his record—very extensive, and very laudable—and we are proud to have him with us here tonight.

Would you like to say a word to us, Dr. Stapleton?

WILLIAM J. STAPLETON, JR., M.D.: What do you call that condition—Globus hystericus? You know, you get a lump in your throat? *(Laughter)*

All I can say, in the spirit of humility, is "Thank you, very very much, for the honor you have done me."

Thank you. *(Applause)*

THE SPEAKER: Is there any unfinished business?

IX—u. RE STUDY OF SURGICAL ASSISTANTS (IN BLUE SHIELD)

R. F. FENTON, M.D.:

Mr. Speaker, inasmuch as there has been considerable discussion of the feasibility of the payment of surgical and assistants' fees under the Blue Shield Plan, and the legality of such action seems to depend upon the interpretation of the ethics involved, and since the Blue Shield in other states is finding it possible to provide for such division of fees, with full knowledge of the patient, I move that this body request The Council of the Michigan State Medical Society to make a thorough investigation of the various ways that Blue Shield might provide for the ethical incorporation of surgical assistants' fees in their plans, and that we transmit these conclusions to the Blue Shield for their action.

THE SPEAKER: You have heard the motion. Is there a second?

J. H. SCHLEMER, M.D.: I second the motion.

(The motion was put to a vote, and carried.)

THE SPEAKER: Are there supplementary reports of reference committees? I believe the first one is the Committee on Special Committees.

XIII—d (2) RE FURTHER STUDY OF HEALTH AND ACCIDENT INSURANCE PROGRAM

C. L. WESTON, M.D., read the supplemental report of the Reference Committee on Reports of Special Committees.

In accordance with the instruction of the House of Delegates at the meeting last evening your reference committee met at 4:30 p.m. with all members present. The items for reconsideration were the resolution of E. M. Krieg, M.D., in regard to continued study by The Council Committee of study of Health and Accident Insurance, and the report of this Study Committee as given in the Handbook on page 140, and as contained in the suppplemental report as given by W. S. Jones, M.D.

The committee reopened the hearing on the resolution by a discussion participated in by some sixteen Delegates and Councilors. A very comprehensive review of the whole situation was made in this discussion and many small details were thoroughly cleared.

Under questioning by the Committee, Doctor Jones reiterated the conclusions reached by the study committee, viz.:

1. The members of the MSMS should not drop any insurance they already have in force.

2. The members of the MSMS are urged to obtain more insurance if possible.

3. The policy or policies examined are sound and the committee advises that the program be handled by individual doctor solicitation by the insurance company or companies concerned.

The Committee again considered the evidence in closed session and unanimously recommends that this resolution be not adopted.

The report of The Council study committee was next considered and the reference committee unanimously recommends the adoption of the study committee report.

The next item of business concerned the resolution introduced by Doctor D. W. Thorup in regard to an amendment to the Basic Science Law of the State of Michigan. During a very thorough discussion by the Committee and interested persons a few minor changes were made in the reading of the resolution.

The committee unanimously recommends the adoption of this resolution as amended.

C. L. WESTON, M.D.: Mr. Speaker, I move the adoption of the committee's recommendations.

The resolution by Dr. Krieg, if you would like the "resolves" repeated, was this:

RESOLVED, That the Insurance Committee of the Michigan State Medical Society continue its investigations for a state-wide health and accident plan; and be it further

RESOLVED, That the bidding on the desired policy be opened to all interested organizations and individuals; and be it further

RESOLVED, That the state and all interested county insurance committees meet to resolve their problems and differences, if any, so that the advantage of a single policy for the entire state membership may be attained.

The committee confirmed its decision of yesterday by recommending that this resolution be not adopted.

Mr. Speaker, I move the adoption of the report of the committee.

R. W. TEED, M.D., I second the motion.

RALPH A. JOHNSON, M.D. (Wayne): Mr. Speaker, there may be a potential conflict that will embarrass the older members who hold health and accident insurance in the six counties that now have policies; they may be placed in jeopardy. I urge caution on the part of this House in accepting this recommendation.

I would move that this portion of the report be re-referred to the committee of The Council studying insurance proper.

THE SPEAKER: Is there a second to that motion?

JOHN T. P. WICKLIFFE, M.D. (Houghton): I move to a point of order. The chairman of our reference committee moved that the report be accepted. I seconded that report, and that is the first business of the House.

THE SPEAKER: The motion to re-refer takes precedence over the main motion. That is open to discussion.

R. W. TEED, M.D.: Was the motion for referral to a committee of The Council, or to a committee of the House of Delegates?

RALPH A. JOHNSON, M.D.: The Council.

R. W. TEED, M.D.: Then it cannot be re-referred, because it has only been referred to this committee.

RALPH A. JOHNSON, M.D.: Mr. Speaker, may I discuss the motion to re-refer to a committee of The Council?

My point is this: If the reference committee report is adopted, it will place in jeopardy the policies now carried by the older members of the six counties that have health and accident insurance.

As Dr. Novy said—much more ably than I—when this original motion came before this House, this thing merits much more study than has been given to date by the Committee on Health and Accident Insurance studies, a committee of The Council of the Michigan State Medical Society.

My motion is to re-refer this measure to that original committee; not to a reference committee.

WILLIAM BROMME, M.D.: Gentlemen of the House, over two years ago, at the request of a doctor outstate from Wayne county, in the State of Michigan, as to whether a policy could be provided for health and accident insurance, because he was in a county society which did not have a group policy because it had not been picked up by an insurance company for group coverage, at the mandate of the House, two years ago, a committee of The Council was formed to study this problem. The doctor who made that request has died in the interim without his question being answered.

The Insurance Study Committee of The Council has been going through this matter, and has spent two years and done much, has built much, has had the advice of a competent insurance broker who has worked for the Ford Motor Company, for U. S. Steel Corporation and other corporations, and I think, prima facie, he could not be assumed to have an inadequate actuarial background.

The policy as studied and as presented is a policy which differs from all policies presently available to doctors, in that it talks in terms of loss of function as against dismemberment.

Now, after two years of work by a serious group, I would be placed in a very difficult position to try to find a committee of The Council to augment the work done to date.

I have no axe to grind. At no time at all has there been any intent—as has been stated and reiterated by the reference committee of this House—to provide anything that asks any doctor to junk what he has. Most of us know that the more we carry, the better off we are. There are thousands of doctors in the State of Michigan who do not have the benefit of group health and accident coverage.

The proposal to return this to a committee of the Council is a very difficult chore, because we have the feeling that we are presenting something that many

doctors in the state need, and it should not place in jeopardy anything which they already hold.

W. S. Jones, M.S. (Menominee): Your committee is made up of Dr. L. Fernald Foster, Mr. Joe Herbert, our legal adviser, Dr. Arch Walls of Detroit, Dr. J. D. Miller of Grand Rapids, and myself. We believe we have made a comprehensive study, thinking in terms of the doctors of the state. At all times have we reported to The Council Executive Committee, and The Council in full.

The first year's study was not satisfactory to us, and we so reported to the House of Delegates. This year we came to a conclusion, as stated by the chairman of the reference committee, and this conclusion was arrived at and presented to The Council as a whole in July.

We do not concur in the notion that a state-wide plan should be instituted that would give the doctors of the State of Michigan the right to have more health and accident insurance than they can procure on an individual basis. We have at no time discussed—at no time have felt—that any group policy would be jeopardized.

We feel very much like the doctor going into the community where there are two doctors ahead of him who are doing well. The third doctor will go in, and if he does a good job and knows his stuff, and does it equally well or better, he doesn't hurt other people, but makes them more active, and they do a better job.

Now, the point of saturation hasn't been reached. We feel the point of saturation hasn't been reached in Wayne County. This isn't a question of trying to hurt someone. This is trying to help all of us.

I'm sure in my feeling that a $300 policy per month is not adequate health and accident insurance. Any doctor in this room, or any doctor in the State of Michigan will take more, and not less, and they are entitled to it.

Now, how can a group that has less than 45 per cent of their enrollment after eleven years be injured by offering them another policy so they can augment that which they have?

We felt we had good advice, and we felt we have done a job as ordered by this House of Delegates. The chairman of the reference committee presented the feeling and thoughts of this committee to you, and I recommend to you, in the name of the committee that I designated, that you accept this recommendation.

The Speaker: Thank you, Dr. Jones.

The Chair cannot help but comment that it would appear that if you vote on this last motion to refer back to committee, you are deciding whether you wish to protect—as is implied in that motion—a relatively small percentage of the total membership of the State Society, or whether you wish to extend to the total membership, which is much larger in number, the opportunity to buy an effective and relatively cheap policy.

Is there other discussion?

Ralph A. Johnson, M.D. (Wayne): Mr. Speaker, speaking as an individual, I feel that the policy as offered by the state committee is an excellent one, and perhaps in many ways is better than the one that we have in Wayne. That is the only one I can speak about. However, I would wish to emphasize to this House, in the strongest language at my command, that there is no intent on the part of the members of the Wayne County Medical Society to prevent or hinder the obtaining of health and accident insurance by the Michigan State Medical Society. That implication—if there has been such—is a canard.

The Wayne County Medical Society is as anxious that the members of the Michigan State Medical Society have adequate protective health and accident coverage as the members of the Wayne County Medical Society. Let that not be an element in the basis of your decision.

Doctors of medicine, perhaps more than any other group—such are the hazards of our trade—need this type of protection.

I am not an actuarial student. I know nothing about the subject. I merely know what I have been told by the Chairman of the Insurance Study Committee of the Wayne County Medical Society in an appearance that was reiterated by Dr. Novy when this matter was first brought forth upon the floor of this House.

As he illustrated with Blue Shield, they would like to have about 75 per cent coverage before going into a company or an area. The implication there was that if you have two competing insurance programs, somebody is going to suffer.

The Chairman of our Insurance Study Committee in Wayne says that the group that will suffer in Wayne—and it is his opinion the same group will suffer in the other six areas—includes the older practitioners. They are the ones I am defending by my motion to re-refer this back to the committee of The Council studying insurance matters.

John T. P. Wickliffe, M.D.: Mr. Speaker and members of the House of Delegates, I have been a delegate to this Michigan House of Delegates for about five or six years, and it seems to me that we very likely oftentimes throw out and discard the work of committees that have spent one or two or three years' time; we want to continue to have them work on and on. Now, you can't spend years and years of your life working out a proposition, and then have the House, in a very light manner, discard it.

This House of Delegates asked The Council two years ago to set up a committee to find out about health and accident insurance policies for the members of the State of Michigan, the doctors out in the state. They made this study for one year, and as Dr. Jones said, they weren't satisfied. They spent another year. Now they have come to a conclusion.

They worked with the entire Council. The Council is composed of our representatives, our directors, the executive board of the Medical Society. If we haven't any confidence in those men, if we have any confidence in the committees to work out problems for us—We on the floor can't do it; somebody has to do it.

I have watched this House of Delegates for several years, and I have watched the Wayne delegates. The Wayne delegates are a very fine bunch of people, and very intelligent, but it sounds to me like they are afraid that what is good for the entire State of Michigan is bad for Wayne County. I don't believe that.

I'm from a small town in the Upper Peninsula of Michigan, 670 miles from here, and I'm sure that all the doctors out in the State of Michigan want sickness and accident insurance. I know that health insurance will not hurt any particular county group.

I have the utmost respect for our Council, for the officers of the Michigan State Medical Society, and for this particular committee.

As a member of the Reference Committee on Special Committees, I can say we sat for two and a half hours and heard Dr. Novy and Dr. Jones and all the advocates of each side, and it is our candid opinion that this resolution introduced by a member from Wayne County should not be accepted. Also, we feel equally unanimously that the report of the committee on sickness and accident insurance should be accepted.

Now, if you continue to throw out the efforts and results of these hard-working committees, I don't know if you will be able to get committees to work on these things in the future. I recommend and urge this House of Delegates, in its sensible, sane decision, to uphold the reference committee's suggestion.

Roger V. Walker, M.D. (Wayne): I'm asking this question for information. Isn't it possible for those who carry a policy from Wayne to carry the state policy, too? Is there anything that makes it impossible to carry both policies? Why should Wayne lose if they can carry the other policy, too?

THE SPEAKER: I have been informed of no reason in the setup.

ROGER V. WALKER, M.D.: If that is so, with all due respect to your statements about it, and others that I have heard, I don't see how that affects the state.

O. K. ENGELKE, M.D.: I move the question.

(The motion was regularly seconded.)

THE SPEAKER: Any other discussion? The chairman of the reference committee, Dr. Weston.

C. L. WESTON, M.D.: I want to bring out one or two points which were certainly thoroughly discussed in the meeting yesterday and today.

In the first place, the emphasis was put upon the fact that this should not work a hardship on anybody who can afford to carry these two policies. The man who has insurance which he prefers to keep—whether it be Wayne County or some other group, or some individual insurance—may certainly keep it. If he wishes, he may participate in the state group, also.

The statement was made—both in committee and on the floor tonight—that the new policy would work a hardship on the older members. The reason stated in the committee meeting was that the new policy would consider a step rate form of premium better than the flat rate, and it may be possible that a step rate form of premium—which increases as we get older—might work some hardship on men who have been established for 20 or 30 or 40 years, but who should be able to carry the load. On the contrary, the flat rate would work a tremendous hardship on the man who has been out two or three years and wants to protect himself and his family against catastrophe, because he would be the fellow who could least afford to pay the increased rate which a flat rate form of policy would necessitate.

So we must consider whether the hardship would really be on the older man who is well established—with possibly a little backlog—or the younger man who is just getting started, who wants to keep himself protected.

THE SPEAKER: Is there other discussion? I will call for the question, which is on the motion by Dr. Johnson to re-refer this back to the Insurance Study Committee. All in favor of that action, say "aye"; opposed, "no." The motion is lost.

You are now back to the motion to disapprove the resolution of Dr. Krieg, which is virtually the same thing. Are you ready for the question?

All in favor of disapproving that resolution, say "aye"; opposed, "no." The motion is carried. It is disapproved.

XIII—d (3). GROUP HEALTH AND ACCIDENT INSURANCE

C. L. WESTON, M.D.: **The report of the Council study committee on Group Health and Accident Insurance** was next considered, and the reference committee unanimously recommends the adoption of the study committee's report.

Mr. Speaker, I move the adoption of this motion.

THE SPEAKER: Is there a second to that motion? Dr. Teed seconds it.

Is there any further discussion on that motion? All in favor of favorable action on the motion, and the report of the study committee, say "aye"; opposed, "no." The motion is carried.

XIII—d (10). AMENDMENT TO BASIC SCIENCE ACT

C. L. WESTON, M.D.: The next item of business concerned the resolution introduced today by Dr. D. W. Thorup, with regard to an **amendment to the basic science act** of the State of Michigan. During a very thorough discussion by the committee and interested persons, a few minor changes were made in the reading of the resolution. The amended resolution reads as follows:

WHEREAS, The necessity of taking an examination in the basic sciences in some instances constitutes an apparently unnecessary expenditure of time, effort and money; and

WHEREAS, Evidence of having successfully passed such an examination is now and should be a prerequisite to licensure to practice any of the healing arts; and

WHEREAS, The purpose of this examination is to demonstrate satisfactory knowledge of these certain designated basic sciences; and

WHEREAS, Other and unimpeachable means are available by which a candidate may demonstrate his knowledge of these certain basic sciences; now therefore be it

RESOLVED, That

1. The "Basic Science Law" be further amended as follows:

Section 5. Any person desiring to practice healing in this state shall make application to the board of examiners in the basic sciences for a certificate of eligibility to take the examinations therein, such application to be accompanied by a fee of $10, and the said board shall issue such a certificate upon the following conditions, namely:

Each applicant shall show to the satisfaction of the board that he is of good moral character, and possesses a high school education or its equivalent; and in addition shall pass an examination before the board to its satisfaction in the following subjects: Anatomy, physiology, pathology, bacteriology and chemistry, with grades of not less than 70 per cent in each subject, provided

(and this is where the Reference Committee's amendment actually cuts in)

that the board shall accept in lieu of this examination an affidavit presented by the candidate or applicant showing that he has successfully passed courses and examinations at a comparable level in these required subjects in a college or university approved by an acceptable accrediting body, such affidavit to be signed by a suitable officer of said college or university.

2. The House of Delegates instructs its Legislative Committee to immediately proceed to prepare with assistance from any qualified individual or group desirable, the necessary instrument to accomplish the above purpose, and present it to the 1954 Legislature of the State of Michigan for action.

The committee unanimously recommends the adoption of this resolution as amended.

R. W. TEED, M.D.: Second the motion.

THE SPEAKER: Any discussion on this motion?

K. B. BABCOCK, M.D.: I will be brief. My main object in being up here is to ask a question of the chairman of the reference committee.

I am uncertain as to what will be interpreted as an "authorized, accredited body." In other words, could not the chiropractors, for themselves, have an authorized accrediting body? Could not the osteopaths and the M.D.'s also have similar bodies? Would it not, in that manner, provide a back door entrance? I'm wondering. I feel that the committee knows the answer; I don't.

C. L. WESTON, M.D.: The question Dr. Babcock asked was discussed in committee. The reason the resolution was amended in that form was to leave it open so that the legislation would designate what would be an approved accrediting body. We did not try to define that in our analysis.

S. L. LOUPEE, M.D.: First I thought he had the answer. Now I'm sure he hasn't, for the same reason that Dr. Babcock has presented. There is no question but that we leave a loophole by which the cultists would come in. Now, what constitutes the decisive group that will decide which qualifying body is capable of doing the accrediting?

I know very well that legislators have no way of deciding. You pretend to leave this to the members of the Legislature, but legislators have no way of deciding what

a qualifying body should be in a scientific proposition of this kind, about which they know nothing. They will take the report of a school, showing so many hours in this subject, so many hours in that subject, so many total hours, and the result is good education. That is the basis upon which the legislators make a decision.

Now, how easy it would be for any of these schools to give so many hours of accredited study, but what does it amount to? You fellows all know the answer to that. I am very, very suspicious that we don't want any of this propostion.

Here's another point. As the body stands today, the qualifying body back of the basic science act, none of them are physicians; none are members of the healing arts. They are simply scientists; they don't have the spirit of the practice of medicine as a background. They can be ever so honest, and their intent can be ever so good, but they go by rule of thumb, and I'm sure that this thing will not work out as we now hope it would.

C. L. Weston, M.D.: Unfortunately, the reference committee was ignorant of the correct name of the approved accrediting body. Someone suggested it was the North Central College Association or some similar name like that, and I think that possibly the reading of the resolution did not bring out clearly the fact that we are not leaving the decision as to the accrediting body to the Legislature. That is to be worked out in legislative committee before the measure is ever presented to the Legislature.

S. L. Loupee, M.D.: May I answer the suggestion by saying that the Legislative Committee is made up of legislators, no more intelligent, no more apprehensive than the average.

C. L. Weston, M.D.: That is our Legislative Committee, Dr. Loupee, the Legislative Committee of the Michigan State Medical Society.

S. L. Loupee, M.D.: I beg your pardon.

Frank A. Weiser, M.D. (Wayne): I think if you take the name of the North Central Association of Colleges and Secondary Schools out of this resolution, you emasculate it.

I agree with Dr. Loupee that if we present it to the legislators, we might just as well kill the basic science law right now.

I think that is terrifically important, because that is the only accrediting body that can certify that these courses were properly taken.

I would strongly recommend that this resolution be referred back to the Resolutions Committee, and let it come out the way Dr. Thorup presented it. It was perfect at that time.

C. L. Weston, M.D.: In answer to that, that was not included in the original resolution. The committee did not feel that it had the authority to define who the governing body would be. We felt that if this went through the proper channels of your own Michigan State Medical Society's Legislative Committee, with assistance from each qualified individual or group of individuals, they would insert the proper name there. We didn't feel that was within our jurisdiction, and that was not included in the original resolution; therefore, we did not emasculate it.

F. A. Weiser, M.D.: Mr. Chairman, may I answer just briefly? There is only one body that can do that, and that is the accredited school. That is the objective here. If the student has passed an accredited school, and the accredited school certifies that, he does not have to take a basic science examination. The only body that can do that in this district is the North Central Association. It is very important that this name appear in the resolution.

The Speaker: I suggest that if you wish to add that as an amendment, it could be voted on at this time.

F. A. Weiser, M.D.: I so move that as an amendment.

D. W. Thorup, M.D.: I'll second that.

C. L. Weston, M.D.: It would then read, **"Provided, that the board shall accept in lieu of this examination an affidavit presented by the candidate or applicant showing that he has successfully passed courses and examinations at a comparable level in these required subjects in a college or university approved by the North Central Association of Colleges and Secondary Schools."** Is that the proper name?

F. A. Weiser, M.D.: "Secondary Schools and Colleges."

C. L. Weston, M.D.: "North Central Association of Secondary Schools and Colleges," such affidavit to be signed by a suitable officer of said college or university.

The Speaker: I want to be sure. That was moved as an amendment. Was that seconded?

P. H. Engle, M.D.: I think we should remind you that there are a great many good schools in this state which are not North Central accredited. There is a State Commission of accreditation that has accredited a great many of the smaller schools. For instance, our own school is not North Central, but it has the accreditation of the State Commission of Accreditation. I think it is unfair to these small schools to tag the North Central limitation on this division.

D. W. Thorup, M.D.: Mr. Speaker, may I ask Dr. Engle a question? Does his school teach anatomy, physiology, pathology, bacteriology and chemistry on a comparable level with that required by the basic science board?

P. H. Engle, M.D.: I would say they do. This school has produced a great many very outstanding medical students. They don't have anatomy, of course. They have physiology, they have chemistry, they have the other basic sciences that would qualify them.

F. A. Weiser, M.D.: Accreditation comes automatically, for instance, when the University of Michigan accepts premedical work from whatever school they accept the student from, so we don't have to worry about that. The important thing is that the schools that teach anatomy and physiology, et cetera, are accredited by the North Central Association. Any student who comes into the medical school and is accepted—the medical school itself will then accredit the person for the courses they have taken. You don't have to worry about that.

W. S. Reveno, M.D. (Wayne): This is a very admirable effort to solve our problem as far as the basic science law is concerned, but as admirable as it sounds, we are being a little bit wishful about this whole thing.

Let us assume at the moment that this particular amendment, with modifications as suggested, is adopted in the Legislature. Do you think for one moment that the osteopaths or chiropractors will stand idly by and allow the doctors to be excluded from having to take the basic science examinations? Don't you think amendments will be started then? And the act will be modified. They will start the ball rolling, and we would precipitate an entire new avalanche of problems on top of those that we have had in the past few years.

The Speaker: Dr. Reveno puts an implication that isn't there. The basic science isn't registration of medicine. The registration said "each applicant."

Is there other discussion?

S. L. Loupee, M.D.: Do I have the privilege of discussing this question again?

The Speaker: Yes, I will recognize you again, Dr. Loupee.

S. L. Loupee, M.D.: Well, as I feel right now, the Legislature in recent years has been bombarded with this basic science act about enough. I think if you throw this whole thing into the Legislature again, you will find them more or less revolting. They are getting disgusted with trying to solve the problems of groups. The groups can't agree, and they say, "The thunder with them! We can't agree, either." Maybe they will throw the whole thing out.

This is an unpropitious time to throw into the Legislature such a radical thing. That's my opinion.

L. F. Hayes, M.D.: I just rise to a point of information. There is a question in my mind as to whether the North Central Association of Colleges and Secondary Schools has accrediting jurisdiction over graduate schools. Does anybody know?

S. L. Loupee, M.D.: I don't think so.

L. F. Hayes, M.D.: Can you answer that, Dr. Weiser?

F. A. Weiser, M.D.: They accept graduates of the North Central Association for admission tc medical school. The North Central Association has nothing to do with the medical schools, per se. Accreditation for the medical schools used to come from the AMA. Now it comes through the accrediting body. We have it in our own hands. However, the accredited medical schools see that the students who enter the schools come from accredited colleges.

The Speaker: Is there further discussion? The discussion is on the question of amending the resolution.

H. J. Meier, M.D. (Branch): I rise to a point of information, as to what territory is covered by the North Central Association. We have forty-eight states. Does it just cover the north central district? We have doctors coming in there from the forty-eight states.

F. A. Weiser, M.D.: I assume that probably means the north central area. There are similar areas of accreditation for the other areas in the United States which are on the same basis as the North Central Association.

J. H. Schlemer, M.D.: Mr. Speaker, I move that this question be referred to the Legislative Committee of the Michigan State Medical Society.

(The motion was regularly seconded.)

The Speaker: It has been moved and seconded that this question be referred to the Legislative Committee of the Michigan State Medical Society. Is there discussion on that motion?

All in favor . . .

O. B. McGillicuddy, M.D.: As a member of that committee, is that "with authority to act"?

J. H. Schlemer, M.D.: That is with authority to act.

E. D. Spalding, M.D.: I thought I was going to leave you talk, but you've pressed me a little far.

This group has spent a great deal of time in recent years, sewing this thing up solidly. The action taken earlier by this group at this session was that we were glad to go ahead and study further improvements of the basic science act, using the committee that knows best the needs for that act, namely, the Basic Science Committee, but at this time and this moment, as Dr. Loupee has already told you, with his experience with the Legislature, this is not the time to open the door one iota.

For heaven's sake, have the good sense—having won a victory—to sit tight for at least one more year, and leave it in the hands of the Basic Science Committee to further study and bring in further recommendations, if that is advisable.

The Speaker: Is there further discussion?

F. L. Troost, M.D.: I would like to say that I think Dr. Schlemer's motion should be defeated. Just send it to the Legislative Committee? I think the House of Delegates itself should decide the question, and not the Legislative Committee, if I understand his motion correctly. Actually, we wouldn't vote on anything, would we?

The Speaker: As Dr. Spalding pointed out, the sentiment of this body has been to continue the study committee in action, and one of the things the study committee was considering was amendments. This involves amendment. Why do you divide responsibility and send part to the study committee and part to the Legislative Committee?

J. H. Schlemer, M.D.: Maybe I should change my motion and make it the study committee (Basic Science).

The Speaker: Would the second accept the change in the motion, that it be referred to the study committee? It has been accepted.

Now we are discussing the referral to the study committee.

D. W. Thorup, M.D.: This motion has come from the study committee. This is a motion which has originated by agreement of all four members of the study committee.

O. K. Engelke, M.D.: Mr. Speaker, I think the gentleman who made the motion recognized that this came from the study committee. I don't believe there is anything out of order for a house to re-refer something back to committee for alteration, further study or change.

The Speaker: No, there is none.

Any other discussion on the motion?

E. D. Spalding, M.D.: What is the immediately pending question?

The Secretary: To refer this question back to the study committee on basic science. All in favor of this action, say "aye"; opposed, "no." **The motion is carried.**

I believe that disposes of the resolution before you.

C. L. Weston, M.D.: Mr. Speaker, **I move the adoption of the report of the committee as a whole, as amended.**

(The motion was regularly seconded, was put to a vote and carried.)

The Speaker: Dr. Engelke's Committee on Hygiene and Public Health has a supplementary report, and we will hear that at this time.

XIII—i (1). RE WATER RESOURCES

O. K. Engelke, M.D. This committee had for its consideration a resolution which was introduced at the first session of this House, **regarding water resources.**

It is the unanimous opinion of the Reference Committee on Hygiene and Public Health, supported by the introducer of the original resolution, that a substitute resolution regarding water resources should be offered to the House of Delegates for its consideration. I will read the resolution.

WHEREAS, The Water Resources Commission is a state agency established to find and eliminate pollution in public waters; and

WHEREAS, Certain raw sources of public water of the state used for domestic and other purposes are being endangered by pollution, or may be further endangered by poor industrial and domestic waste disposal practices; and

WHEREAS, The relocation of raw water sources for domestic and other purposes is now contemplated by many municipalities, to escape such pollution; and

WHEREAS, This relocation may be necessary for the protection of the public health; now therefore be it

RESOLVED, That the State Water Resources Commission be commended for its pollution control efforts to date, and be supported in any intensification of such activities in the future; and be it further

RESOLVED, That the Water Resources Commission press for any needed improvements in legislation to eliminate pollution and to protect currently clean sources of raw water, and to make available its counsel to those municipalities undertaking locally financed studies to find new sources for water for domestic consumption and other purposes.

Mr. Speaker, I move the adoption of this resolution.

J. H. Schlemer, M.D.: Second the motion.

The Speaker: Any discussion on this motion?

(The motion was put to a vote, and carried.)

XIII—i (4). RE FLUORIDATION OF WATER

O. K. Engelke, M.D.: This committee also considered one resolution regarding the **fluoridation of water.** The resolution as originally introduced has been amended slightly by the elimination of one sentence. I will read the resolution which was unanimously recommended by the committee for presentation to this House:

WHEREAS, The fluoridation of public water supplies has been adequately demonstrated to result in the reduction of dental caries; and

WHEREAS, The safety of this procedure has been proven and accepted; and

WHEREAS, The prevention of disease has been the goal of medicine throughout history; and

WHEREAS, The American Medical Association has endorsed the principle and safety of fluoridation, as have many state and territorial health associations, the American Dental Association, the American Public Health Association and the National Research Council; now therefore be it

RESOLVED, That the Michigan State Medical Society reaffirm the position of the American Medical Association and its resolution of 1951 in the endorsement of fluoridation of public water supplies, and commends the dental profession for its contribution to medicine and for this added means of prevention of disease.

Mr. Speaker, I move the adoption of this resolution.

S. L. Loupee, M.D.: Second the motion.
(The motion was put to a vote, and carried.)

XIII—i (5). RE MIGRATORY WORKERS

O. K. Engelke, M.D.: The last resolution referred to the Reference Committee on Hygiene and Public Health was one pertaining to Migratory workers, referred to in the excellent report of our own Dr. E. F. Sladek of Traverse City. We had the counsel of the originator of this resolution, and we called upon Dr. Sladek for his counsel, and it was the opinion of these two gentlemen—and the entire committee—that this resolution regarding migratory workers should be rewritten to read as follows:

WHEREAS, E. F. Sladek, M.D., of Traverse City, has worked diligently and untiringly as the representative of the Michigan State Medical Society on the Subcommittee on Health, Welfare, Housing and Sanitation of the Michigan Study Commission of Migratory Labor; and

WHEREAS, Dr. Sladek has submitted a comprehensive report to this Subcommittee, which report has been approved by the House of Delegates of the Michigan State Medical Society; now therefore be it

RESOLVED, That Dr. Sladek be commended for his good work; and be it further

RESOLVED, That the Michigan State Medical Society encourage the continuation of the Committee's work with the support of the Michigan State Medical Society; and be it further

RESOLVED, That the Michigan Study Commission on Migratory Labor be urged to circularize Dr. Sladek's report to every county board of supervisors and health and welfare unit in the State of Michigan.

Mr. Speaker, I move the adoption of this resolution.
(The motion was regularly seconded, was put to a vote, and carried.)

O. K. Engelke, M.D.: I move the adoption of this report of the committee as a whole.

R. W. Teed, M.D.: Second the motion.
(The motion was put to a vote, and carried.)

XIII—f (5). RE JOINT COMMITTEE FOR ACCREDITATION OF HOSPITALS

The Speaker: I believe there is a supplementary report from the Reference Committee on Resolutions, by Dr. Johnson.

Ralph A. Johnson, M.D. (Wayne): Two resolutions were referred to this committee. The first was introduced by Dr. Babcock of Wayne County. The resolution is as follows:

WHEREAS, The interests of the medical profession and their patients are best served by the mutual cooperation of all physicians; and

WHEREAS, Specialty groups have the privilege of naming representatives to the Joint Commission for the Accreditation of Hospitals; now therefore be it

RESOLVED, That the Michigan State Medical Society request its Delegates to the American Medical Association to recommend that the American Academy of General Practice be accorded the same privilege, and that the Board of Trustees of the American Medical Association be requested to permit the American Academy of General Practice to name two of the six AMA representatives to the Joint Committee for the Accreditation of Hospitals.

Your reference committee is unanimously in favor of this resolution. Mr. Speaker, I move the adoption of this portion of the report.

(The motion was regularly seconded, was put to a vote, and carried.)

XIII—f (6). RE LOWERING OF MSMS DUES

Ralph A. Johnson, M.D.: The next resolution was introduced by Dr. Fenton of Wayne County, and is as follows:

WHEREAS, The urgency for the Michigan State Medical Society special dues of $20 yearly has lessened; and

WHEREAS, Better public relations can often be performed better on the level of the county society; and

WHEREAS, It might be unwise to raise the total dues of county society members beyond their present rather high levels; and

WHEREAS, A reduction in state dues would allow county societies to raise their dues a proportionate amount with less concern; therefore be it

RESOLVED, That the Michigan State Medical Society dues be reduced $10 yearly to allow the implementation of an increase in county society dues when justified.

As a substitute for the above resolution, your reference committee submits the following recommendation: In view of the information obtained by your reference committee on such short notice, we are of the opinion the dues should not be reduced at this time. We do, however, recommend that this problem be reviewed by The Council of the Michigan State Medical Society and the Public Relations Committee, and if need in any area is found, the feasibility of aid be considered.

Mr. Speaker, I move the adoption of this portion of the report.

R. W. Teed, M.D.: Second the motion.
(The motion was put to a vote, and carried.)

Ralph A. Johnson, M.D.: Mr. Speaker, I move the adoption of the report as a whole.

R. W. Teed, M.D.: Second the motion.
(The motion was put to a vote, and carried.)

The Speaker: The report as a whole is approved.

XIII—g. SPECIAL MEMBERSHIPS

The Speaker: I believe there is a supplementary report on special memberships, a few that have been cleared, by Dr. DeBoer.

G. W. DeBoer, M.D.: Several men who have not been okayed by the House of Delegates have been approved since this morning's reading of the names I gave you. We have had both certification from the office of the Michigan State Medical Society and a resolution on the following members since this morning's report.

For Retired Membership:
Hugh M. Beebe, Washtenaw.
Horace R. Cobb, Kalamazoo.
Chas. P. Drury, Marquette.
Richard C. Lyle, Saginaw.
W. H. Mast, Lenawee.
B. Morgan Parker, Macomb.
Alan Richardson, Wayne.
John O. Wetzel, St. Clair.
For Life Membership:
Jesse L. Bender, Octonagon
Ralph G. Cook, Kalamazoo.
C. E. Lockwood, Oakland.
Guy Marshall McDowell, Livingston.
Augustus J. O'Brien, Gogebic.
E. K. Simpson, Oakland.
For Associate Membership:
F. O. Kirker, M.D., Medical Society of North Central Counties.

Mr. Speaker, I move that these men be approved for their various classifications.

J. P. Markey, M.D., Second the motion.

(The motion was put to a vote, and carried.)

XIV. ELECTIONS

The Speaker: The next item of business is Item 33, **Elections.** I will turn the chair over for the time being to the Vice Speaker, Dr. Livesay.

(The Vice Speaker, Dr. Livesay, assumed the chair.)

Vice Speaker: The Chair requests the following men to be tellers: Dr. Donald Pike, Dr. C. L. Candler, and Dr. Franklin Baske.

I would also like to point out that in your handbook this year the ballots are provided for your selections.

XIV—a. COUNCILOR, ELEVENTH DISTRICT

Our first election is for **Councilor of the Eleventh District.** Dr. Charles A. Paukstis of Ludington is the incumbent. Nominations are now in order.

Robert D. Risk, M.D. (Muskegon): Mr. Speaker, and members of the House of Delegates, I would like to preface our nomination for Councilor of the Eleventh District by thanking Dr. Paukstis of Ludington for having served as Councilor in a most efficient and faithful manner.

In compliance with the unanimous vote of the Muskegon County Medical Society, I submit the name of Dr. William LeFevre in nomination for the position of Councilor of the Eleventh District.

He is a graduate of the University of Michigan, 1923, a Fellow of the American College of Surgeons, a member of the American Diabetes Association, President of the Michigan Diabetes Association. He is Past President of the Muskegon County Medical Society, and Secretary of that organization, 1946 to 1952, inclusive, and is a Past President of the Michigan State Medical Society Secretaries' Association.

Thank you.

Norbert W. Scholle, M.D. (Muskegon): I second the nomination of Dr. William LeFevre.

Vice Speaker: The nomination has been made and seconded. Are there any further nominations?

Ralph A. Johnson, M.D. (Wayne): I move that the nominations be closed, and that the Secretary be instructed to cast one ballot for the election of Dr. LeFevre.

(The motion was regularly seconded, was put to a vote, and carried.)

J. E. Livesay, M.D.: The motion is carried, and the Secretary is so instructed. Dr. LeFevre is elected.

XIV—b. COUNCILOR, TWELFTH DISTRICT

Nominations are now open for **Councilor of the Twelfth District.** Dr. A. H. Miller, of Gladstone, is the incumbent. Are there nominations?

William F. Mertaugh, M.D. (Chippewa): At the Upper Peninsula meeting I talked to our incumbent, Dr. Miller, and he stated that he definitely didn't care to run, soI would like to nominate Dr. Montgomery, from Chippewa County, who has been a delegate the past few years, and who is willing to run for that office.

T. P. Wickliffe, M.D.: I would like to heartily second the nomination.

Vice Chairman: Are there further nominations?

R. W. Teed, M.D.: I move that the nominations be closed and that the Secretary be instructed to cast the unanimous ballot for Dr. Montgomery.

R. A. Johnson, M.D.: I support it.

(The motion was put to a vote, and carried)

Vice Chairman: The motion is carried, and Dr. Montgomery is elected by declaration of the Secretary.

XIV—c. COUNCILOR THIRTEENTH DISTRICT

Nominations are now open for **Councilor from the Thirteenth District.** Dr. W. S. Jones of Menominee is the incumbent.

J. R. Heidenreich, M.D.: After yesterday afternoon's session and today's sessions, I think no introduction is needed for Dr. Jones. We wish to keep him in office, and I nominate him. (*Applause*)

T. P. Wickliffe, M.D.: I would like to second the nomination of Dr. Jones.

Vice Chairman: Are there further nominations?

S. L. Loupee, M.D.: I move that the nominations be closed, and that the Secretary be instructed to cast the unanimous ballot of this House for the election of Dr. Jones.

R. A. Johnson, M.D.: Support it.

(The motion was put to a vote, and carried.)

Vice Chairman: The motion is carried, and Dr. Jones is declared elected by the Secretary.

XIV—d. COUNCILOR SEVENTEENTH DISTRICT

Nominations are now open for **Councilor for the Seventeenth District.** Dr. W. B. Harm of Detroit is the incumbent.

R. A. Johnson, M.D.: Mr. Speaker, Justice Oliver Wendell Holmes, who lent dignity, judgment as well as capacity to the Supreme Court, was known as "the great dissenter." Today we have a comparable man on the Council of the Michigan State Medical Society, in Win Harm. He is a great dissenter. He also has dignity, judgment and capacity.

Dr. Harm has felt that perhaps he has rendered a disservice to the Council by being a member of it, by his feeling that perhaps he has been an obstructionist on some occasions. It is my privilege and pleasure to place his name in nomination as Councilor from the 17th District to succeed himself.

Elmer C. Texter, M.D. (Wayne): Second the motion.

Vice Chairman: Are there any further nominations?

G. C. Penberthy, M.D.: I move that the nominations be closed, and the Secretary be instructed to cast the unanimous ballot for Dr. Harm.

K. B. Babcock, M.D.: Second the motion.

(The motion was put to a vote, and carried.)

The Speaker: Dr. Harm is declared re-elected.

XIV—e. DELEGATES TO THE AMERICAN MEDICAL ASSOCIATION

We now come to the election of **Delegates to the American Medical Association.** The incumbents are Dr. Hyland of Grand Rapids, Dr. Johnson of Detroit, and Dr. DeTar of Milan. Nominations are now in order.

W. B. Mitchell, M.D. (Kent): I wish to place in nomination the name of a man who is not an obstructionist. He has been a hard working man on the House of Delegates of this body, and for the past number of years has been a worker for the House of Delegates in the American Medical Association. I wish to present the name of Dr. William A. Hyland. (*Applause*)

G. W. DeBoer, M.D.: Second the nomination.

The Speaker: Are there further nominations for the office of Delegate to the American Medical Association?

E. D. Spalding, M.D.: Mr. Speaker, representing Wayne County at the moment, Wayne County honors itself by placing in nomination our present President, Ralph Johnson, who has so ably served us in this capacity.

The Speaker: Dr. Ralph Johnson is nominated; seconded by several.

Are there further nominations?

R. W. Teed, M.D.: I nominate Dr. J. S. DeTar, of Milan, for the third place.

The Speaker: Dr. DeTar has been nominated; seconded by several.

Dr. W. B. Mitchell: Hearing no further nominations, I would move that the nominations be closed, and the Secretary be instructed to cast the unanimous ballot for these three members to the House of Delegates. (*Laughter*)

The Speaker: Is there a second to that motion? It is seconded by several.

Now, gentlemen, I'd like to ask you a question. The Constitution of this Society states that voting must be by ballot. What is your pleasure? Is it necessary that seniority be determined for delegates? I know it is for alternates.

Well, we have three candidates, provided you pass this motion. All those in favor of closing the nominations, say "aye"; opposed, the same sign.

Will you please tear off your first ballot and vote for these men, marking them 1, 2 and 3? We will therefore have the situation of the man with the lowest score being the winner and senior delegates. Understand? Mark them 1, 2 and 3; 1 is your first choice.

Gentlemen, it appears to us that all three of these men will be elected to office, and while the tellers are out, we can proceed with the next item of business, which is the **election of alternate delegates to the American Medical Association.** If I hear no objection, we will now open the floor to nominations.

XIV—f. ALTERNATE DELEGATES TO THE AMERICAN MEDICAL ASSOCIATION

Walter S. Stinson, M.D. (Bay): Mr. Speaker and gentlemen, it gives me great pleasure at this time to bring before this body a name for your consideration for the office of alternate delegate to the American Medical Association, a man in whom my society and the Public Relations Department of this Society have the utmost confidence as an industrious executive and organizer.

His work as chairman of the committee which successfully defeated the invasion of the osteopaths in our general hospitals—which, had it failed, could have set a precedent which might have been dangerous to all municipal hospitals in this state—has brought him wide attention.

He has also served for four years as field secretary for the Council on Industrial Health from the main office of the AMA in Chicago, and therefore he is familiar with the inner workings of that Association.

He has been a delegate from Bay County for the past five years, since 1948. His advice and experience on osteopathic problems has been invaluable.

He is a graduate of the University of Michigan, 1930, having done postgraduate work in surgery in 1949 and 1950 at that same institution.

I would like to propose the name of Orlen J. Johnson, of Bay County, as alternate delegate to the AMA.

Vice Speaker: Dr. Johnson of Bay has been nominated, and seconded.

Gentlemen, before I recognize anyone else, the Vice Speaker would like to apologize for not affording the incumbents the same courtesy as the previous officers.

The incumbents for alternate delegates are E. F. Sladek, of Traverse City; W. W. Babcock, of Detroit; and E. C. Texter, of Detroit. I regret the oversight.

Roger V. Walker, M.D. (Wayne): It gives me great pleasure to place in nomination one of the men from Wayne who has represented the Society as President of the County Society and who has the backing and support of the Wayne delegation—Warren W. Babcock, whom you all know.

The Speaker: Dr. Warren W. Babcock has been nominated, seconded by several. Seconded by Young of Wayne.

L. F. Hayes, M.D. (North Central): I would like to place in nomination the name of a man for whom I have the highest esteem, a man who has—in the quite a number of years he has served in the practice of medicine—been a very faithful worker and a very hard worker, a man who has been in constant attendance at the county medical meetings, who has been a member of this House of Delegates on a number of occasions, a man who has previously been an alternate delegate to the American Medical Association, a man who has a flair for organization, as shown by his spearheading of the drive to start the American Academy of General Practice, and a man who has always been very kind to young neophytes, and who has been responsible for trying to interest young men in being active in their societies.

I would like to place in nomination the name of Elmer Texter.

Vice Speaker: Dr. Elmer Texter has been nominated, and seconded.

Are there further nominations for alternate delegate?

Ralph A. Johnson, M.D. (Wayne): Mr. Speaker, am I correct in understanding that Dr. Sladek has not been renominated to succeed himself?

Vice Speaker: That is correct.

R. A. Johnson, M.D.: I should like to place his name in nomination. I should like to call the attention of the House to the fact that Dr. Sladek has rendered a service of inestimable value to your delegation to the American Medical Association. He was your first alternate delegate this year. Had one of your delegates not been able to attend any of the sessions of the 1953 meetings, Dr. Sladek is the man who would have been seated. Such is the order of precedence, and such is the importance of your vote on alternate delegates.

Not only do I wish to place Dr. Sladek in nomination, but I wish to call to your attention the importance of your vote for alternate delegate. Should one of the men you elect as delegate be unable to attend a session of the House of Delegates of the American Medical Association, the alternate is the one who is seated.

Frank D. Johnson, M.D. (Genesee): Second the nomination.

S. L. Loupee, M.D.: I want to second the nomination of Dr. Sladek most heartily. My contact with him, as a worker in this Society, has been very gratifying.

Vice Speaker: Also seconded by Dr. Loupee.

Paul Ivkovich, M.D. (Mecosta): I move that the nominations be closed.

(The motion was regularly seconded, was put to a vote, and carried.)

Vice Speaker: The names are: O. J. Johnson, of Bay City; W. W. Babcock, of Detroit; Elmer Texter, of Detroit; and E. F. Sladek, of Traverse City.

Again, you are to vote for three men, and mark your ballots, 1, 2 and 3. The man with the lowest score is the winner, the second lowest score is the next winner, and the third lowest will be the third winner.

E. F. Lutz, M.D.: Mr. Chairman, I'm wondering on that point. You might have a man who only got one vote. If he got low score, he would be the high man.

E. D. Spalding, M.D.: The way to resolve that mess is to vote for one man at a time; only one position at a

time, and fill it. Then open the second position and fill that.

VICE SPEAKER: Actually, what it means is that the man who gets the most first votes is the winner. To my knowledge, Dr. Spalding, there is no precedent for conducting the election as you proposed. We have always done it this way, and we have got entangled some time—

E. D. SPALDING, M.D.: This whole thing is on your shoulders. *(Laughter)*

VICE SPEAKER: It has been pointed out, gentlemen, that in all fairness, you should vote for three men.

E. D. SPALDING, M.D.: And, Mr. Speaker, a case happened in this very room this afternoon where half the ballots came through with votes for a handful. Many of the ballots—about half—cast in the room this afternoon did not vote the total of 13 that they could. Some of them had only two.

VICE SPEAKER: Do you have the ballots marked? Are you ready for the tellers? Will somebody please call the tellers?

W. S. STINSON, M.D.: Regarding the seniority of the men, you have three men not being voted on this year. Where do they stand for seniority?

VICE SPEAKER: They have seniority over the men elected tonight. They are the men who hold over this office from the previous election.

All right, we'll appoint three new tellers—Dr. Dibble, Dr. Teed and Dr. Schlemer. Please get up and collect the ballots.

(Collection of ballots.)

VICE SPEAKER: The results of the election for delegates to the AMA, in order of seniority, are as follows: **Dr. Hyland, Dr. Johnson, Dr. DeTar.**

XIV—g. PRESIDENT-ELECT

We will proceed with the nomination and election of the President-elect. Nominations are now in order for this office.

ETHAN B. CUDNEY, M.D. (Oakland): Mr. Chairman, fellow delegates: Some fifty years or so ago an event took place in our State of Michigan, in the County of Bay, in the city of Bay City. There was a male child born. He didn't amount to very much, and he didn't create much of a disturbance, but for three days that youngster cried. He howled; he just raised the devil. All the neighbors came in to try to pacify him, but they didn't know what to do. Finally his Dad said, "I'll fix the little monkey." So he proceeded to go out to the hitching post where he had his horse and carriage tied, ready to make an emergency call, got out his bag and looked into it, and found a stethoscope. He brought it in and gave it to the youngster. The youngster put the stethoscope where he now has his teeth, and proceeded to start chewing on it. He was pacified.

That was the start of the man I propose to you, in his informal education. He was brought up in a family with a medical environment. His illustrious father was one of the pioneers of medicine in Michigan. He was a very, very active man. He put a foundation under this kid of 3-to-1 concrete, which is a good, rich mixture, well mixed, and he put that foundation far below the frost line. That foundation has stood well through the years.

This illustrious father of this man—that baby—carried on for a good many years. This Society saw fit to elect him as its President in 1919.

Well, the kid grew and grew, and he was exposed to the stethoscope and the percussion hammer and all those things that a kid gets in the medical family, and somewhere along the line he got hold of a violin, and he learned how to fiddle, but every once in a while he would blow off and have to get his teeth into something concrete. Eventually, he arrived at the University of Michigan in 1913. He was graduated in 1916, and was elected to an honor society, Sigma Psi or Phi or something like that—that's immaterial.

He started his internship, and that was interrupted by World War I. He served in the Army in Washington as a lieutenant. He returned to the University and took more work in surgery. He is one of the older Life Members of the College of Surgeons. He left the University in 1920 and settled in Pontiac, and started a pretty good practice.

One night while he was fiddling, a burning question came up, but he didn't keep on fiddling. He took that question, which concerned a local county society, and he proceeded to wrestle with the local county society through these many years, and he has served the Oakland County Society through these years in its various offices. He has represented us in this House of Delegates for many years.

He fiddled a little more, and along came some civic problems, including the addition or building of a new hospital. With this square jaw of his, and firm teeth, he got his teeth into that problem, and he carried the hospital to a successful conclusion.

And now we're in a mess again; I guess we'll have to get him false teeth. Anyway, he has been a pillar of strength for the hospital, for the Medical Society.

But that wasn't all. He had to be one of the charter members of the Kiwanis Club. He was interested—and has been—in the school system of Pontiac, one of the reasons being that he was married and had two children, a boy and a girl. Now he is a grandfather four times, with four girls.

He was known as a kind of a messer-upper with our city commission when we were after the city commission to get things for the good of the hospital, for the good of the people who were going to use the hospital, and for the good of the family physicians who are practicing there.

Along came the depression, and we had quite a lot of indigents, and the Medical Society was a little bit inclined to go on strike. That was about the time that strikes were good things to get into, or everybody seemed to think so. It was through this man that we arrived at a fee schedule which was pretty satisfactory, and is still pretty satisfactory.

After all of these things, he began to look around for something more to do, and along came Michigan Medical, who crossed the door, and we all know what a mess that was in. He got that into his teeth, and he has been working on that ever since, with excellent results, as you all know.

The next thing, we got him interested in the State Society, for some reason or other, and he has been your Vice Speaker for three years. He has been your Speaker for four years.

There is one other thing I would like to say about this man. He has always stood ready to give advice and counsel to the younger man coming into the community. I think he is deeply interested and always has been interested in proper, good medical education and ethics, and I deem it one of the greatest pleasures of my twenty-five years in the Association to give to you our own Bob Baker for President-elect of this Society. *(Applause)*

E. C. TEXTER, M.D.: It gives me great pleasure to second the nomination.

G. C. PENBERTHY, M.D.: I second the nomination.

VICE SPEAKER: Are there further nominations for President-elect?

R. W. TEED, M.D.: I move the nominations be closed.

PAUL IVKOVICH, M.D.: I move that the nominations be closed and that the Secretary cast the unanimous vote of the Society for Dr. Baker.

(The motion was regularly seconded, was put to a vote, and carried.)

VICE CHAIRMAN: The Secretary is so instructed.

(The audience arose and applauded as Dr. Baker resumed the chair.)

THE SPEAKER: Thank you, gentlemen. I deeply appreciate it; I truly do. I think you mean it. I

think it pleases me because it is in line with my interest in medicine all these years.

There was something my father taught me before I graduated in medicine. He discouraged me from becoming a doctor until I had made up my mind. Then he said, "Okay, I'll help you." And one of the things he said to me was, "Join the medical society, son, just as soon as you are off on your own, and stay with it, and go to the meetings at every opportunity. And don't worry about the money, because you'll never regret your associations in organized medicine." And I believe he was right.

I have an additional pride, a personal one, a family pride, because I now have the opportunity to succeed to the office that my father once held. I don't think that has been done in this Society before, and maybe you'll never want to do it again. *(Laughter)*

I shall attempt to do the best I can. I certainly couldn't quit after what Dr. Cudney has said, because I got some meat in my teeth, and I have to get it out.

I would like to use the words which Ralph Johnson used so beautifully in speaking of Dr. Harm But I wish I could serve you as Dr. Harm is described—with dignity and judgment and capacity. I shall try, and I thank you. *(Applause)*

The tellers are still out.

It has been a little custom for some years back that we recognize the Past Presidents who may be in the room, and I wish they would step forward. I can't call them in order.

Is Dr. Hubbell here? Will you step forward, Dr. Hubbell? We're going to line up the Past Presidents here.

Is Dr. Beck here? Dr. Beck, will you come forward?

Dr. Umphrey? Dr. Barstow? Dr. Sladek? Dr. Hyland?

Dr. Corbus is here; I believe I have seen him.

Dr. Penberthy?

We have two Presidents-for-a-Day, Dr. Haughey and Dr. Novy. If they are here, will they step forward?

Dr. Urmston is in the audience. Will you step forward?

Dr. Hirschman and Dr. Robb—are they in the audience? Or any other Past Presidents? Dr. Cook was here. Dr. Keyport. Are there any others I have neglected to mention who might be in the audience?

XV. MESSAGE TO PAST PRESIDENT—R. S. MORRISH, M.D.

L. M. Bogart, M.D.: May I bring up something now, as you are speaking and bringing forward your Past Presidents? Dr. R. S. Morrish, Past President, has been very ill, and has been confined to his home and hospital off and on for the past year. I would like to suggest that a note or letter be written to him, telling him how we miss him at this meeting. I make that as a motion, if I may.

(The motion was regularly seconded, was put to a vote, and carried.)

The Secretary: The Secretary will be so instructed.

I think it is very nice to bring your Past Presidents before you again so you can see them all. I wish you gentlemen would rise and honor these Past Presidents who have served you so well.

(The audience arose and applauded.)

The Secretary: Dr. Hyland and Dr. Sladek should be out there. Will they step forward to join this distinguished group?

E. D. Spalding, M.D.: Would it be in order to have one future President join this group?

The Secretary: Very much so. Dr. Hull, will you step forward? *(Applause)* He was just peeking around back of that thing, just like he did yesterday when he was supposed to make a speech. He started to disappear. I saw him. *(Laughter)*

We have the report of the tellers for alternate delegates. Number 1 alternate, Dr. Sladek; Number 2, Dr. Babcock; Number 3, Dr. O. J. Johnson.

XIV—h. SPEAKER

The next item of business is the nomination and election of a Speaker of the House of Delegates. Can I have your nominations?

Clifford W. Colwell, M.D. (Genesee): The man whose name I would like to present to you for Speaker of the House needs no build-up by me or any other individual in this audience. He is well known by everybody here; he has been sitting at Dr. Baker's right hand for the last four years, and ably assisting him.

It gives me pleasure, indeed, and it is a privilege to nominate Dr. Jackson Livesay of Genesee County as Speaker of the House of Delegates. *(Applause)*

The Speaker: Are there other nominations?

J. H. Schlemer, M.D.: Mr. Speaker, I move the nominations be closed, and that the Secretary cast the unanimous ballot for the election of Dr. Livesay as Speaker.

(The motion was variously seconded.)

The Speaker: It has been moved and seconded that the nominations be closed, and that the Secretary cast the ballot unanimously for Dr. Livesay.

All in favor of this, say "aye"; contrary? The motion is carried, and, Jack, I thank you and congratulate you.

Furthermore, there is something else I have had in my dresser for four years which should be worn.

This is the badge for the speaker—the official badge.

J. E. Livesay, M.D.: I didn't even know there was one. I've never seen it. *(Laughter)*

All I can say is that I am mighty glad that election turned out as it did—not sour, or this might have turned out sour. *(Laughter)*

The Speaker: You'll have a lot more to hear from Jack. I think you made a wonderful selection. I can't say too much for the help that he has been to me, and that is reflected in the confidence you have, because he has saved you gentlemen a great deal of time by prompting me in tight spots. In fact, some of you may wonder how I got out of the hole when I got out of it yesterday.

(Discussion off the record.)

XIV—i. VICE SPEAKER

The Speaker Nominations are in order for Vice Speaker.

Frank D. Johnson, M.D. (Genesee): I have a young man in mind for Speaker who has been a delegate here for some time. He is hard-working, conscientious, and is a maker of night calls in Lansing, Michigan. At the present time he is president of his society. I nominate Dr. Kenneth Johnson, of Lansing.

(The motion was regularly seconded.)

John R. Rodger, M.D.: As we all know, the Vice Speaker, in addition to taking over for the Speaker if anything happens to him, has another important responsibility. He is ex officio a member of the Executive Committee of The Council, although without vote, but with the power to attend meetings and to discuss and to vote in the absence of the Speaker. Of all the county societies in the state, it seems to me that one of the most important ones as far as public relations to the whole organization is concerned is the one in which our capital lies.

It occurs to me, in seconding the nomination of Dr. Kenneth Johnson, that it would be highly important and very advantageous for a man who is very competent—and one of the leaders of his own society in the capital of our state—to be able to know month by month what was transpiring in our state society, to be able to communicate to them certain things which otherwise might be a little difficult for them to find out. I think it would be mutually advantageous, gentle-

men, if we had a Vice Speaker from the Ingham County Society.

R. W. Teed, M.D.: I move the nominations be closed.

F. A. Weiser, M.D.: I would like to make a nomination. I come to talk to you about probably the most generous cribbage player in the world. If you play cribbage and want to win money, play with this man.

And there is a very strange analogy to our President-elect. When he was about ten years old, he failed his course in civics, and, like our President-elect's father, when his father was told he had failed the course in civics, the father said, "I'll fix him, the little monkey." Ever since that time he has had a great interest in parliamentary procedure.

I'm talking about the "Earl of Sugarbush Road," known to us affectionately as Earl Krieg. I think you all know him. I'm sure he is going to do a good job. He has always done a good job in anything that he has accepted. Therefore, I would like to nominate Dr. Krieg.

The Secretary: Dr. Krieg has been nominated, and seconded.

Are there any nominations?

Orlen J. Johnson, M.D. (Bay): I move that the nominations be closed.

(The motion was regularly seconded, was put to a vote, and carried.)

The Secretary: You now have to vote on Ken Johnson and Earl Krieg. The tellers who took the first ballot will be designated the tellers for this ballot, Baske, Candler and Pike.

While this is being collected, we wish to remind the delegates that tomorrow we go into our scientific sessions. Exhibits will be open; please visit them so you may learn from them.

The Secretary: I would like to take this opportunity to thank the committees. They have done a swell job, as they have in the past, and I thank them individually and collectively. I particularly thank all of the reference committees. I know you have done a good job in appointing the references committees. I have tried to distribute the work among them. I have also tried to alternate, somewhat, the job of chairman. Sometimes the chairman and his committee have received a pretty heavy load, as has happened at this meeting. But they have done a swell job, and I think we have given them fair consideration of their reports, and I thank them all. I would rather thank them verbally than try to write a letter, which is a cold way of expressing appreciation.

I would also like to thank those men who came to the supper Sunday night and received some instructions. There were four of them who acted as preprandial hosts, which was a very nice gesture, and we appreciate that.

The report of the tellers of the election for Vice Speaker of the House of Delegates: Dr. Kenneth Johnson is elected.

Dr. Johnson, will you stand? Come up here so they can all get a good look at you, just so they'll know you next year.

Kenneth H. Johnson, M.D. (Ingham): May I say a word?

The Secretary: You may; I'll be glad to have you, sir,

K. H. Johnson, M.D.: I watched the deliberations of this group this year with enthusiasm. I am very sure my shoulders are broad enough to carry Jack Livesay's head when it is bowed in the future deliberations. *(Laughter and applause)*

The Secretary: You mean when it is bowed, or when it rolls? There have been times when I thought mine was going to roll. *(Laughter)*

I congratulate you, Dr. Johnson.

Before we reach adjournment, may I thank all of you again for your consideration. These have been four wonderful years. Somebody asked me why the heck anybody should want this job, and it has been trying at times, but it has meant the association with you. It gives me a chance to continue my contact with the state organization and what it stands for, and I'm for that.

It is especially a privilege to sit in the Executive Committee meetings, and with The Council, because you'll never have a finer bunch of fellows. You don't have to be ashamed of them.

You delegates are the leaders of your own societies. That is why you are here. You have selected the men you think will help in the interim between our annual meetings. I know they will do an excellent job for you on your Council and your Executive Committee. Sometimes the decisions are tricky; sometimes they recommend something you don't approve of, but our democratic system provides for that. Our organization does these things, and it is a great privilege to work with you. I know somebody asked me why anybody would want to accept the position that you have given me, but I think that is the answer, that it is a great privilege to work for you. And I don't want to sever my connections with the fellows I have worked with for seven years here, and more. This gives me a chance to hang on just a little bit longer.

I want to thank Dr. Livesay again for his valiant service, and our Secretary, Dr. Foster, and Mr. Bill Burns and the rest of the staff.

XVI. ADJOURNMENT

If there is nothing else, we will declare this session adjourned. Thank you.

(The meeting adjourned at ten-forty o'clock.)

INTEGRATIVE STUDY OF HYPERTENSION

(Continued from Page 1319)

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1123 David Whitney Bldg.

(The Council on Pharmacy and Chemistry of the American Medical Association has adopted the following statement which appears in New and Nonofficial Remedies, 1953, Philadelphia, J. B. Lippincott Company, pp. 171-173, 1953.)

Methantheline Bromide.—*Banthine Bromide (Searle)*

β-Diethylmethylaminoethyl 9-xanthenecarboxylate bromide

Actions and Uses.—Methantheline bromide, a parasympatholytic agent, produces the peripheral action of anticholinergic drugs such as atropine and the ganglionic blocking action of drugs such as tetraethylammonium chloride. Tolerated amounts of methantheline bromide exert side effects typical of atropine-like drugs, but cause less tachycardia, and also cause less postural hypotension than does tetraethylammonium chloride. Toxic doses produce a curare-like action at the somatic neuromuscular junction.

Clinical studies indicate that the drug effectively inhibits motility of the gastro-intestinal and genito-urinary tracts and, to a variable degree, diminishes the volume of perspiration and salivary, gastric, and pancreatic secretions. It also decreases mucoprotein secretion. Like atropine, it produces mydriasis and cycloplegia when applied locally to the eye or administered systemically, but until more clinical evidence becomes available, its local use for this purpose is not recommended. The value of the drug for preventing abnormal cardiac reflexes through the vagus during thoracic surgery, or as an agent for routine preoperative medication in place of atropine, requires further investigation before final conclusions can be reached.

Methantheline bromide is indicated for clinical use whenever anticholinergic spasmolytic action is desired, provided it is not contraindicated because of its atropine-like characteristics or because of a patient's intolerance to the unavoidable side effects of such therapy. It is useful as an adjunct in the management of peptic ulcer, chronic hypertrophic gastritis, certain less specific forms of gastritis, pylorospasm, hyperemesis gravidarum, biliary dyskinesia, acute and chronic pancreatitis, hypermotility of the small intestine not associated with organic change, ileostomies, spastic colon (mucous colitis, irritable bowel), diverticulitis, ureteral and urinary bladder spasm, hyperhidrosis or control of normal sweating which aggravates certain dermatoses, and control of salivation.

Methantheline bromide produces some degree of cycloplegia and mydriasis in therapeutic doses and therefore should not be administered to patients with glaucoma. It sometimes decreases the ability to read fine print. Xerostomia (dryness of the mouth) is a common, sometimes transient, side effect. Urinary retention of varying degrees may occur in elderly male patients with prostatic hypertrophy, and some patients may have difficulty emptying the rectum. Patients with edematous duodenal ulceration may experience nausea and vomiting during initial administration of the drug. These patients should take only liquids during the institution of drug therapy. All patients should be advised of the possible occurrence of side effects. Overdosage sufficient to produce a curare-like action may be counteracted by prompt subcutaneous injection of 2 mg. of neostigmine methylsulfate.

Dosage.—Methantheline bromide is administered orally or parenterally by either the intramuscular or intravenous route. Parenteral administration is not advised for patients able to take the drug orally. The average initial dose for adults, oral or parenteral, is 50 mg. For patients with considerable intolerance, 25 mg. may be employed. In the management of peptic ulcer, a beginning schedule of 50 mg. three times daily before meals, and 100 to 150 mg. on retiring is suggested. However, the usual effective dose is 100 mg. four times daily, although some patients may require more or less than this amount. The dosage may be increased to tolerance, using dryness of the mouth as a guide, and adjusted to meet the individual response of patients. Maintenance dosage in peptic ulcer is usually considered to be about one-half the therapeutic level. In the management of other hypermotile or hypersecretory states, the dosage should be adjusted to the smallest amount which will relieve the symptoms. When spastic conditions are secondary to inflammatory or other organic lesions, therapy directed toward the cause should be employed whenever possible.

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Powder Banthine Bromide: 2 cc. ampuls. 50 mg.
Tablets Banthine Bromide: 50 mg.

Say you saw it in the Journal of the Michigan State Medical Society

Michigan's Department of Health

Albert E. Heustis, M.D., Commissioner

FLUORIDATION BENEFITS MORE THAN EXPECTED

Fluoridation has had even more dramatic results in reducing tooth decay than was originally anticipated.

Dental examinations after eight years of fluoridation of Grand Rapids water show that six-year-old youngsters have 71 per cent less caries incidence in their permanent teeth than children of that age before fluoridation began. Even more surprising, the sixteen-year-olds have 25 per cent less decay.

The caries reduction in older children was more than expected. The sixteen-year-olds, who were eight at the time fluoridation began, were not expected to achieve much benefit from the procedure, inasmuch as most of their permanent teeth had already developed. It was originally thought that fluoridated water would have an appreciable caries-reducing effect only on those youngsters who drank it during the first eight years of life when the teeth were being formed.

While much greater benefits accrue to those youngsters who drink the water from birth, still a 25 per cent reduction in the decay-rate of the older children represents a considerable dividend in health protection.

Another significant finding was that in 57 per cent of the six-year-olds, the six-year molars were caries-free. Prior to fluoridation only 17 per cent had caries-free six-year molars at this age.

The teeth of Grand Rapids youngsters were examined prior to the introduction of fluoride in the water in 1945 and have been examined each year since by the same team of examiners from the National Institute of Dental Research. Ninth-year examinations are now in progress.

WHEN TO FILE A STILLBIRTH CERTIFICATE

The question still comes up from time to time as to when to file a stillbirth certificate. Stillbirths were redefined February 10 in accordance with Section 326.15, Compiled Laws of 1948, as amended by Act 65, P.A. 1952. The definition is as follows:

Stillbirth is death prior to the complete expulsion or extraction from its mother of a product of conception which has advanced through the twentieth week of uterogestation; the death is indicated by the fact that after such separation, the fetus does not breathe or show any other evidence of life such as beating of the heart, pulsation of the umbilical cord, or definite movement of voluntary muscles. A stillbirth certificate must be filed.

If the child shows any evidence of life after complete birth, even though it be only momentary, the birth shall be registered as a live birth, and a death certificate shall also be filed.

NEW DIVISION TITLE

The Department's Division of Industrial Health has been renamed the Division of Occupational Health. The change in title was made to describe more accurately the scope of work of the division which is concerned not only with the prevention of health hazards in industry but also in agriculture and other occupational fields as well.

BIRTHS GOING UP

Skyrocketing birth registrations during August and September have led Department statisticians to believe that Michigan is in for another record birth year, with the number of registrations likely to reach 180,000. More birth—16,966—were recorded in Michigan in September than during any other month in the State's history.

STAFF POSITIONS OPEN

The Michigan Department of Health has two openings on its staff for physicians: one to head the Section of Adult Health in the Division of Tuberculosis and Adult Health, the other to head the Section of Acute Communicable Disease Control in the Division of Disease Control, Records and Statistics. The latter position calls for a knowledge of epidemiology. Both positions require, in addition to Michigan licensure, a master's degree in public health. Three years' experience in public health programs is also desirable.

NEW NUTRITION APPRENTICE

Marie Fecht will serve an apprenticeship in public health nutrition for one year, part of the time in the Department's Nutrition Section for orientation, after which she will be assigned to the Grand Rapids-Kent County Area.

CHANGE OF ADDRESS

The Muskegon County Health Department recently moved into new quarters. The new address is 36 West Muskegon Avenue, Muskegon.

NEW HEALTH OFFICERS APPOINTED

William J. Morrow, M.D., has been appointed acting director of the Manistee-Mason District Health Department effective November 1.

Jerome Van Gasse, M.D., has been appointed director of the Jackson City Health Department effective October 22.

NEW NURSING CONSULTANT

Miss Stephanie Szloch, R.N., joined the staff of the Maternal and Child Health Section on October 27 as a consultant in the Maternity Hospital Consultation and Licensing Program.



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MICHIGAN AUTHORS

Oliver B. McGillicuddy, M.D., Lansing, is the author of an article entitled "Facial Nerve Paralysis of Twenty Years' Duration," published in *Archives of Otolaryngology,* September, 1953.

R. C. Hildreth, M.D., Kalamazoo, is the author of an article entitled "The Third Most Important Room in the Hospital," published in *Medical Radiology and Photography,* Volume 29, Number 1, 1953.

Robert W. Buxton, M.D., James H. Maxwell, M.D., and **A. James French, M.D.,** Ann Arbor, are authors of an article entitled "Surgical Treatment of Epithelial Tumors of the Parotid Gland," published in *Surgery, Gynecology and Obstetrics,* October, 1953.

Conrad R. Lam, M.D., and **E. J. Gordon, M.D.,** Detroit, are the authors of an article entitled "Carcinoma of the Cervical Esophagus and Larynx," published in *The Journal of the American Medical Association,* October 10, 1953.

H. Saul Sugar, M.D., Detroit, is the author of an article entitled "Early Diagnosis of the Adult Primary Glaucomas," published in *Eye, Ear, Nose, and Throat Monthly,* April, 1953, an abstract of which is published in *International Record of Medicine and General Practice Clinics,* September, 1953.

William H. Havener, Harold F. Falls, Harry B. McGee, Ann Arbor, are authors of an article entitled "Experimental Hydrosulphosol Therapy of Thermol and Chemical Ocular Burns in Rabbits," published in *Eye, Ear, Nose, and Throat,* April, 1953, an abstract of which is published in *International Record of Medicine and General Practice Clinics,* September, 1953.

Milton F. Bryant, M.D., Ann Arbor, is co-author of an article entitled "Acid Phosphatase Activity as a Test for Gastric Carcinoma," published in *University of Michigan Medical Bulletin,* September, 1953.

James B. Ludwig, M.D., Ann Arbor, is the author of an article entitled "A Study of Possible Effects of Citrated Blood Transfusions upon the Recipient's Coagulation Mechanism," published in *University of Michigan Medical Bulletin,* September, 1953.

Harry McGee, M.D., and **Harold F. Falls, M.D.,** Ann Arbor, are authors of an article entitled "Hereditary Polymorphous Deep Degeneration of the Cornea," published in *Archives of Ophthalmology,* October, 1953.

Cyrus C. Sturgis, M.D., Ann Arbor, is the author of an article entitled "Some Recent Advances in Hematology," published in *The Journal of the Medical Association of Georgia, October,* 1953.

H. Marvin Pollard, M.D., Ann Arbor, is the author of an article entitled "Therapy Not to Employ in the Treatment of Peptic Ulcer," published in *Current Medical Digest,* October, 1953.

Thomas N. James, M.D., and **Ellet H. Drake, M.D.,** Detroit, are authors of an article entitled "Cryoglobulins in Coronary-Artery Disease," published in *The New England Journal of Medicine,* October 8, 1953.

Russell N. DeJong, M.D., and **Kenneth R. Magee, M.D.,** Ann Arbor, are authors of an article entitled "Antispasmodic Compound 08958 in Treatment of Paralysis Agitans," published in *The Journal of the American Medical Association,* October 24, 1953.

Harold F. Schuknecht, M.D., Detroit, is the author of an article entitled "Techniques for Study of Cochlear Function and Pathology in Experimental Animals," published in *Archives of Otolaryngology,* October, 1953.

K. R. Magee, M.D., and **R. N. DeJong, M.D.,** Ann Arbor, are authors of an original article, "Antispasmodic Compound 08958 in Treatment of Paralysis Agitans" which appeared in *The Journal of the American Asso-tion* on October 24, 1953.

C. R. Lam, M.D., and **E. J. Gordon, M.D.,** Detroit, are authors of "Carcinoma of the Cervical Esophagus and Larynx," which appeared among Clinical Notes in *The Journal of the American Medical Association,* October 10, 1953.

* * *

Dr. Orrin E. Madison, chemistry professor at Wayne University, has been replaced as a member of the Michigan Basic Science Board by Governor G. Mennen Williams, through the appointment of Dr. Carl A. Hoppert, professor of chemistry at Michigan State College. The board will elect a chairman later.

The Governor and Dr. Madison have been feuding over the Board's attitude regarding doctors, osteopaths, and chiropractors who have passed other state examinations but could not be admitted to Michigan without taking additional examinations.

* * *

Compulsory use of identification badges of dark russet leather by all hospital personnel attending patients, both military and civilian, has been prescribed by the Army Medical Service in an administrative letter recently sent out.

"The early establishment of rapport between the patient and all hospital personnel serving him can be facilitated by ease of identification," reads the letter. "The patient in his adjustment to hospital life realizes a more secure feeling when he can identify by name those who are entrusted with his care."

Several Army hospitals have been using identification badges for such personnel for some time and the administrative letter now makes the practice general. This is being done in connection with new procedures for preparation of the patient's bed card, both steps being taken that "mutual confidence between patient and hospital personnel will be better developed with resultant benefit to all."

* * *

The Doctors Texter, father and son, are equally well known for their contributions to medical literature and their service in medical organizations.

E. C. Texter, M.D., Detroit, was one of the organizers of the American College of General Practice and its first national president. He has held various offices in medical organizations, has served as alternate delegate to the House of Delegates of the American Medical Association, and is the author of a number of medical papers. His son, E. Clinton Texter, Jr., M.D., who was recently appointed to the staff of Northwestern University Medical School and Passavant Hospital, Chicago, Illinois, is associated with Clifford J. Barborka, M.D., of Chicago, in the practice of internal medicine and gastroenterology.

Dr. E. C. Texter, Jr., is a graduate of Wayne University College of Medicine and interned at Providence Hospital in Detroit. He served two years on the medical service at the U. S. Naval Hospital, St. Albans, New York, where he was Chief of the Heart Station for eighteen months. He participated in an Office of Naval Research project at the Vascular Research Laboratory at Cornell University Medical College and completed the basic science course given by the New York Postgraduate Medical School. Subsequently, he was a Research Fellow in Medicine at New York Hospital, Cornell Medical Center, and a Resident in Medicine at the New York University Division of Goldwater Memorial Hospital. For the past two years Doctor Texter has been on the gastrointestinal service at Duke University School of Medicine where he was an instructor in Medicine. He also served as Attending Physician in Medicine to the U. S. Veterans Administration Hospital at Fayetteville, North Carolina. He has passed the American Board of Internal Medicine. He is a member of the Chicago Medical Society, Illinois State Medical Society, American Medical Association, American Federation for Clinical Research, Sigma Xi, and the American Board of Internal Medicine. He has been author or co-author of twenty-three papers.

* * *

The recent election of officers to the Western Michigan Pediatric Society, conducted by mail, resulted as follows: President—Sidney Heersma, M.D., Kalamazoo; President-Elect—John Sander, M.D., Lansing; Secretary—John Thomson, M.D., Grand Rapids; Assistant Secretary—Clarice McDougall, M.D., Grand Rapids.



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1. Reich, C., and Mulinos, M. G., Treatment of Refractory Nutritional Anemia with Gelatine. Bull. N.Y. Med. Coll. March 1953.

How to Administer Knox Gelatine Concentrate Drink!



Each envelope of Knox Gelatine contains 7 grams which the patient is directed to pour into a ¾ glass of orange juice, other fruit juices, or water, not iced. Let the liquid absorb the gelatine, stir briskly, and drink at once. If it thickens, add more liquid and stir again. Two envelopes or more a day are average minimal doses. Each envelope contains but 28 calories.

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It was decided at an informal meeting in conjunction with the recent Michigan State Medical meeting, that due to the lengthy program arranged in conjunction with this meeting and the numerous pediatric conventions in October, to dispense with the usual October program. A meeting was held in Grand Rapids on November 11 in the Morton House Hotel. The speaker, Dr. Robert S. Ziegler, physician in charge of the Section of Cardiology at Henry Ford Hospital, chose as his subject, "Pediatric Cardiology."

As a replacement for the October session, a program is being arranged to be held in Jackson, in May, 1954, with two speakers—one in the late afternoon, and one in the evening. This will be held at the Country Club.

* * *

The American Academy of General Practice makes the first official announcement of its Sixth Annual Scientific Assembly which will be held March 22-25, 1954, in the Public Auditorium, Cleveland, Ohio, by disclosing the names of such topflight men as Sir Alexander Fleming, Dr. Howard Rusk, and Dr. E. J. McCormick, who will headline the scientific program.

* * *

The House Interstate and Foreign Commerce Committee health hearings were halted October 14 after two days of testimony on the extent of health insurance coverage in the United States. Three days of hearings at which Blue Cross, Blue Shield, labor groups, and others were to testify were cancelled. Chairman Charles Wolverton, of New Jersey, explained the committee had gathered so much material since it began hearings October 1 that the time had come to stop and analyze the testimony to date. He said the hearings undoubtedly would be resumed at some future date. However, he set no definite time for resumption.

Major insurance companies outlined the progress of health insurance in the United States, which was described by a witness as the most rapidly growing type of voluntary social insurance the world has ever seen. At the turn of the century forty-seven companies were writing insurance, with 463,000 policies in force. Today, about 800 insurors are providing accident, health, hospital, and medical expense insurance, another witness stated. More than 91,000,000 men, women, and children now have hospitalization protection, 73,000,000 have surgical expense coverage and 36,000,000 are protected for medical expense. Last year about $1 billion was paid by voluntary health plans for hospitalization, $500 million for surgical and doctors' bills and another $500 million in benefit payments to replace family income lost through sickness or injury.

About a million persons are now covered for catastrophic illness and that experience demonstrates that "everybody wants this coverage." This type of insurance can only hope to succeed with the "intelligent cooperation of the medical societies and the doctors themselves . . . This insurance is not a bonanza to increase the cost of medical care. It is being provided to enable the public to voluntarily insure its health risks."

Witnesses from both insurance companies and business firms with health plans stressed the importance of the voluntary approach.

The figures on the number of *individual policyholders* as of last December 31 were supplied the committee: 22,254,000 with hospital coverage, 19,196,000 with surgical coverage and 5,118,000 with general medical insurance. The latter policies are issued to individuals by commercial insurors and are available to cover dependent spouse and children to age nineteen.

* * *

American troops in certain overseas commands will be given anti-influenza vaccine this year, according to an announcement by the Department of the Army.

According to Maj. Gen. George E. Armstrong, Surgeon General of the Army, troops in Alaska, Europe and the Far East will be given immunization during November. In addition, troops designated as overseas replacements between November 15 and March 31 will be given influenza protection in ports of embarkation in the United States prior to sailing.

"Experience during the 1952-1953 respiratory disease season, as in other years, demonstrated that effective use of influenza vaccine results only when it is administered prior to the onset of epidemics," General Armstrong declared.

* * *

The University of Michigan Medical School, Department of Portgraduate Medicine, announces brief review courses for practicing physicians in 1954, as follows:

Anatomy .....(Thursdays) February 11-May 27
Clinical Internal Medicine
(Thursdays) January 7-April 15
Diseases of the Heart.....March 15-19
Electrocardiographic Diagnosis.....March 22-27
Metabolism and Endocrinology.....March 29-April 2
Rheumatic Diseases.....April 12-17
Diseases of Blood and Blood Forming Organs
April 19-24
Diseases of Gastrointestinal Tract.....April 26-May 1
Recent Advances in Therapeutics,.....May 3-7
Neurology, Clinical.....March 8-9-10
Obstetrics.....January 20-21-22-23
Gynecology.....February 24-25-26-27
Ophthalmology.....April 19-20-21
Pediatrics.....March 31-April 2
Roentgenology, Diagnostic.....April 5-9

For further information, write to Dr. Howard H. Cummings, Chairman, Department of Postgraduate Medicine, University Hospital, Ann Arbor, Michigan.

* * *

Dr. Clarence B. Hilberry was inaugurated as the fourth president of Wayne University on November 9 in ceremonies at the Rackham Memorial Building, Detroit. Delegates from more than 300 colleges and universities and 250 learned societies throughout the world were present for the investiture, including L. W. Hull, M.D., Detroit, representing the Michigan State Medical Society.

Dr. Hilberry came to Wayne University as an English instructor in 1930. Later he was named chairman of the department and became Dean of Administration in 1945.

* * *

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number of Fellowships offered to qualified candidates who wish to pursue a graduate course of instruction in preparation for the practice of Industrial Medicine. Stipends for the first two years, in accordance with the marital status of the physician range from $2,100 to $3,000. For further information, write the Institute of Industrial Health, College of Medicine, Eden and Bethesda, Cincinnati 19, Ohio.

* * *

C. D. Munro, M.D., of Jackson, recently was honored by receiving a "Layman of the Year" award in recognition of his many years of service in the First Presbyterian Church of Jackson.

* * *

The American Foundation for Allergic Diseases has been formed with headquarters at 525 Lexington Avenue, New York. Dr. Horace S. Baldwin, New York, is president of the new Foundation.

* * *

FIFTEENTH ANNUAL CLINIC DAY PROGRAM

Mount Carmel Mercy Hospital

January 27, 1954

Morning Session—8:45 a.m.

Charles A. Doan, M.D.
Professor of Internal Medicine, Ohio State University, Columbus, Ohio
"The Better Prognosis of the Leukemia Patient."
Warren H. Cole, M.D.
Professor of Surgery, University of Illinois, Chicago, Illinois.
"Problems in Surgery of the Aged."
Maurice C. Pincoffs, M.D.
Professor of Internal Medicine, University of Maryland, Baltimore, Maryland
"Certain Aspects of the Obesity Problem."
Lauren V. Ackerman, M.D.
Professor of Pathology, Washington University, St. Louis, Missouri
"The Surgical Pathologist's Responsibility to the Patient with Cancer."

Luncheon—12:00 M.

(Courtesy of the Sisters of Mercy)

Afternoon Session—1:30 p.m.

Meredith Campbell, M.D.
Professor of Urology, New York University, New York, N. Y.
"Common Urologic Problems in Infants and Children."
Henry L. Bockus, M.D.
Professor of Internal Medicine, University of Pennsylvania, Philadelphia, Pennsylvania
"Functional Disorders of the Gastrointestinal Tract."
Walter T. Dannreuther, M.D.
Professor of Obstetrics and Gynecology, Postgraduate Medical School, New York University, New York
"Office Gynecology."
Henry W. Cave, M.D.
Professor of Surgery, Columbia University, New York, N. Y.
"The Changing Concept in Surgery of Ulcerative Colitis."

Evening Activities—7:30 p.m.

Banquet and Entertainment, Statler Hotel, Detroit

Scientific Exhibit

Lawrence Wm. Gardner, M.D.
Director of Laboratories, Mount Carmel Mercy Hospital.
"Hürthle Cell Tumors of the Thyroid Gland."

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The Michigan Alcoholic Rehabilitation Foundation is a non-profit organization devoted to the proper hospitalization of alcoholics seeking to stop drinking.

Contributions to the Foundation are deductible and should be sent to 2379 National Bank Bldg., Detroit 26, Michigan.

ANNUAL CLINICAL CONFERENCE

CHICAGO MEDICAL SOCIETY

March 2, 3, 4, 5, 1954 • Palmer House, Chicago

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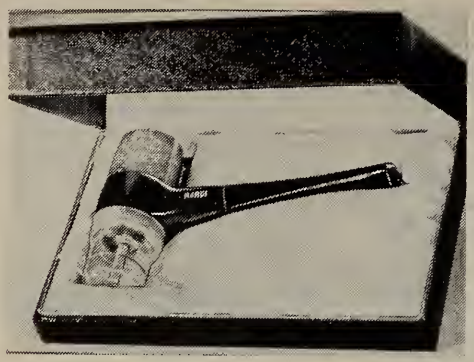
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HARPER HOSPITAL REUNION—DETROIT MARCH 11

Hear Ye, Hear Ye, Hear Ye!

After a long interval, Harper Hospital is again to have a Harper Hospital Alumni Reunion (Dinner) to which all Alumni of the Hospital, as well as the active and House Staff are invited. The date is March 11, 1954, coincident with the meeting of the Michigan Clinical Institute. The purpose is to renew all friendships, to revive old and pleasant memories, to make new friends, and to let you know what is happening at the Hospital, and what progress has been made.

A Committee is being formed to take care of the details, and we trust that you will mark this down on your calendar for a "must." Be sure to come to the Michigan Clinical Institute and be certain to attend the Harper Hospital Reunion of Thursday, March 11, 1954, Grand Ballroom, Sheraton-Cadillac Hotel, Detroit.

The Joint Committee on Chest X-Ray, American College of Chest Physicians, has just issued its report. Copies are available by writing the Executive Offices of the American College of Radiology, 112 E. Chestnut Street, Chicago 11, Illinois.

* * *

Dr. Harvey M. Merker, director of scientific relations for Parke, Davis & Company, Detroit, recently received an honorary doctor of engineering degree from the University of Michigan.

Congratulations, Dr. Merker!

* * *

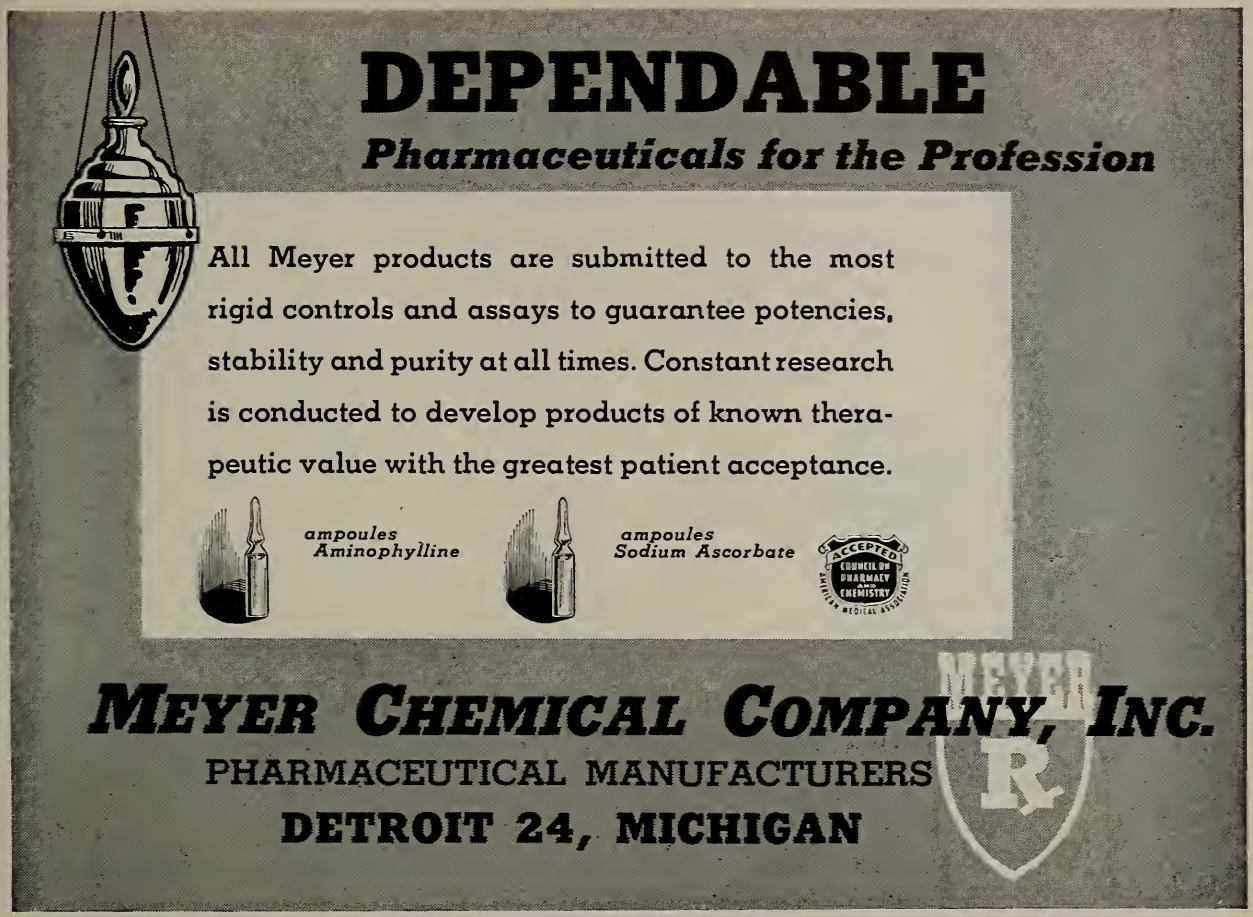
Florence S. Burns, formerly public relations consultant to the Michigan State Nurses Association in Lansing, has been appointed to the Committee on Careers of the National League for Nursing, with headquarters at 2 Park Avenue, New York 16, N. Y.

* * *

The Michigan Chapter, Arthritis and Rheumatism Foundation, has contributed $78,200 for grants-in-aid for research into the cause and cure of arthritis during the past year. In addition, $36,000 has been set aside for treatment of "home-bound" arthritic persons through the Visiting Nurse Associations in metropolitan Detroit, Grand Rapids, Flint, Pontiac, Bay City, Lansing, Port Huron, Saginaw, Marquette and Ypsilanti. This service is given by nurses trained in physical therapy, under the direction of the patients' doctors.

* * *

The Pan American Medical Association will hold its Ninth Inter-American Medical Congress in Caracas, San Juan, Ciudad Trujillo, St. Thomas, and Havana. The Congress will sail from New York on January 6 for the South American and Caribbean ports. For itinerary and full information, write Dr. Charles Crocker, Executive Secretary, c/o 9 East 47th Street, New York 17, N. Y.



Joseph I. Fitzsimmons, M.D., has been named manager of the Veterans Administration Hospital at Iron Mountain, Michigan.

* * *

The Henry Ford Hospital Medical Society invites all MSMS members to attend its monthly meetings, scheduled as follows:

February 9, 1954—"Roentgen Manifestations of Acute Abdominal Disease" by William R. Eyler, M.D., Detroit.

March 9, 1954—"Some Problems of Biliary Tract Disease" by I. S. Ravdin, M.D., Philadelphia, Pa.

April 13, 1954—"The Certified Chaplain and the Modern Hospital" by Russell L. Dicks, Ph.D., Durham, N. C.

April 30, 1954—"The Expanding Scope of Cardiovascular Surgery" by Alfred Blalock, M.D., Baltimore, Md.

All meetings are held in the Henry Ford Hospital Auditorium beginning at 8:15 p.m.

* * *

The International College of Surgeons announces the Nineteenth Annual Congress of the United States and Canadian Sections of the College, to be held at the Palmer House in Chicago on September 7-10, 1954; the Ninth International Congress of Surgery will be held at Sao Paulo, Brazil, April 26-May 2, 1954.

* * *

Marine City Hospital Staff confined to M.D.'s.—By a more than two-thirds majority of the civic groups represented in the Marine City Memorial Hospital Association, a hospital staffed only by doctors of medicine was favored. The vote of October 8 changes the constitution of the Association to read that hospital facilities will be available only to duly licensed doctors of medicine.

The controversy as to whether the hospital should be open to all physicians or to doctors of medicine only has been an issue since the Association was formed in 1946 to study and complete plans for the construction of a new hospital in Marine City. The Association now has about $120,000 in its building fund for the hospital.

* * *

Albert D. Ruedemann, M.D., Detroit, addressed the Academy of Medicine of Toledo and Lucas Counties on October 30. His subject was "The Importance of the Eyes in the Learning Process." A dinner for the speaker preceded the meeting. E. F. Ockuly, M.D., Toledo, was chairman of the meeting, which was attended by several hundred practitioners of northwest Ohio.

* * *

"The Fight Against Cancer," a television survey of the progress of the combat against America's most dreaded disease, was seen on most stations of the NBC-TV network, Nov. 5, at 10 o'clock, Eastern Standard Time.

The program, the second on the March of Medicine series, originated in New York.

By television the viewers were transported to medical centers throughout the country, giving, insofar as

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possible, a national picture of present status of research on cancer, its palliation, and cure. The segments that made up the program showed the basic cell research as to the cause and character of cancer and the various forms of therapy now in use and in development.

From the Pacific Coast, Dr. Edward L. Tatum, of Stanford University, outlined the progress made in the study of the basic cell components.

Dr. Wendell Stanley, Nobel Laureate, gave a brief glimpse into his work on viruses as a possible factor in cancer.

Dr. Charles B. Huggins, of the University of Chicago, demonstrated the use of hormones in the alleviation and elimination of certain types of cancer.

Dr. Harold C. Urey, University of Chicago Institute for Nuclear Studies, Nobel Prize Winner in Chemistry, and one of the three wartime atomic chiefs, introduced the section on radiation therapy from the spot on which the first sustained nuclear reaction was achieved.

Dr. James Carpender, Associate of the Argonne Cancer Research Hospital, Chicago, demonstrated new equipment for the application of radiation in cancer therapy.

From New Orleans, the eminent surgeon Dr. Alton Ochsner, Professor of Surgery of Tulane University, discussed the tremendous advances made in cancer surgery, with emphasis on lung surgery.

A most promising field of cancer research, the one from which many doctors expect the ultimate conquest of cancer, is the field of medication. For this segment the television viewers were taken to Memorial Hospital in New York City where Dr. David A. Karnofsky demonstrated the advances and the scope of research in the use of drugs in the control and cure of cancer.

The March of Medicine program was carried over seventy-two stations of the National Broadcasting Company and the Canadian Broadcasting Corporation networks. The program time was purchased and the telecast arranged by Smith, Kline and French Laboratories.

* * *

Morton Hack, of the Hack Shoe Company, was elected president of the Michigan Shoe Retailers Association at its annual meeting in November.

* * *

Beaumont Memorial.—The cornerstone for the Beaumont Memorial on the site in Mackinac Island where the Michigan State Medical Society is restoring the trading store of the American Fur Company, was laid on July 17 (see THE JOURNAL, May 3, 1952, p. 70; March 28, 1953, p. 117). Dr. Reader J. Hubbell, Kalamazoo, president, Michigan State Medical Society, the Hon. W. F. Doyle, Mackinac Island State Park Commission, and Dr. Otto O. Beck, Birmingham, chairman, Beaumont Memorial Fund, officiated at the cornerstone laying. Participating in the ceremony were Dr. William S. Jones, Menominee; Dr. Albert H. Miller, Gladstone; Dr. William Bromme, Detroit; Dr. Alfred H. Whittaker, Detroit; the Hon. G. Mennen Williams, governor of Michigan; the Hon. Leslie O'Brien, mayor of Mackinac Island; and the Rev. Thomas W. Murphy, Detroit. The ceremony commemorated the historical episode on June 19, 1822, when Dr. William Beaumont began the treatment of Alexis St. Martin for a gaping



THE COCA-COLA COMPANY

gunshot wound in the stomach and, through his observations on the gastric fistula became the first to study the process of digestion in life.—Extract from *The Journal, American Medical Association,* October 24, 1953.

* * *

Correction.—The name "Walter" L. Whitaker, Ph.D., Assistant Dean and Associate Professor of Anatomy at the University of Michigan Medical School—as published in October JMSMS, page 1120—was in error. Dr. Whitaker's first name is Wayne.

* * *

HEART MEETINGS SCHEDULED FOR 1954

FIFTH ANNUAL MICHIGAN HEART DAY (during Michigan Clinical Institute), Detroit—March 12.

ANNUAL MEETING OF THE AMERICAN HEART ASSOCIATION, Chicago—April 1, 2.

SECTION ON CLINICAL CARDIOLOGY OF THE AMERICAN HEART ASSOCIATION, Chicago—April 3, 4.

SECOND INTERNATIONAL CONGRESS OF CARDIOLOGY, Washington, D. C.—September 12-15.

27th SCIENTIFIC SESSION OF THE AMERICAN HEART ASSOCIATION, Washington, D. C.—September 16-19.

Memorial Clinic Proposed.—The late Dr. O. R. MacKenzie, killed in an automobile accident September 17, was an important man in this area.

Evidence of this was shown this week as residents in the community and nearby set Monday night for a memorial rally to discuss proposals for a medical clinic to be named in the doctor's honor.

Suggestions that a clinic or small hospital be built as a memorial to Dr. MacKenzie came from interested individuals, according to the Rev. O. A. Gerken of St. Matthews Lutheran Church.

Tonight, however, civic groups and organizations in Walled Lake and surrounding areas will have a chance to enter the picture. A meeting has been set for 8 p.m. in Lutheran Church to which all organizations are invited to send representatives.

In addition to being well known throughout the county as a physician, Dr. MacKenzie had been president of the Oakland County Medical Society.

His primary concern, friends said, was the health and physical care of men, women and children in the expanding metropolitan area. He had planned a clinic to serve the region.

Monday's memorial rally will be held at 8 p.m. in the gymnasium of Walled Lake High School.—*Pontiac Daily Press,* Oct. 9, 1953.

* * *

The Michigan Heart Association does not provide financial aid to any persons. The association does provide service to the physician in the care of his patients.

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SURGERY—Intensive Course in Surgical Technic, two weeks, starting January 18, February 1, February 15, 1954.

Surgical Technic, Surgical Anatomy and Clinical Surgery, four weeks, starting March 1, 1954.

Surgical Anatomy and Clinical Surgery, two weeks, starting March 15, 1954.

General Surgery, two weeks, starting April 26, 1954.

Surgery of Colon and Rectum, one week, starting March 1, 1954.

Fractures and Traumatic Surgery, two weeks, starting March 1, 1954.

GYNECOLOGY—Intensive Course, two weeks, starting February 15, 1954.

Vaginal Approach to Pelvic Surgery, one week, starting March 1, 1954.

OBSTETRICS—Intensive Course, two weeks, starting March 1, 1954.

MEDICINE—Electrocardiography and Heart Disease, two weeks, starting March 15, 1954.

Gastroscopy, two weeks, starting March 8, 1954.

Two-week Intensive Course starting May 3, 1954.

DIAGNOSTIC X-RAY—Clinical Course every week by appointment.

CYSTOSCOPY—Ten-day practical course starting every two weeks.

UROLOGY—Two-week Intensive Course starting April 19, 1954.

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What Can Happen in Twenty Years.—Paul L. Martin, chief of the Washington Bureau of the Gannett newspapers, presents some startling figures in the October issue of the *American Mercury*. The facts he revealed certainly set a person to thinking. His article deals with government spending during the twenty years just ended. Here is the record:

In those twenty years, the government spent more than $775,000,000,000 and ran up a net deficit of more than $239,000,000,000. In other words, it spent almost half again as much as it was able to collect, despite ever-increasing taxes.

At the end of fiscal 1933, the national debt amounted to a fraction less than $180 for each American. Now the figure is above $2,000.

In 1933, a typical family with a $4,000 a year income paid $44 in federal income taxes—now it must pay close to $500.

In the last fiscal year, tax collections were 2,100 per cent greater than in 1933.

Read those figures again. Then answer this question: How long can any nation stand such a trend without going bankrupt?

* * *

Wayne and Harper Affiliation Approved.—The Detroit Board of Education has granted approval to the Wayne University College of Medicine to undertake a close and active affiliation with Harper Hospital, Detroit.

Under terms of the agreement, applications for appointment to the Harper medical staff would be referred to the administrative committee of the College of Medicine for recommendation prior to their consideration by the Harper executive committee.

The medical school dean will serve as an ex officio member of the executive committee of the Harper medical staff while the director at Harper would serve in a similar capacity on the administrative committee of the College of Medicine.

The arrangement and any of its provisions are subject to review and revision at the request of either institution.

* * *

J. E. Livesay, M.D., Flint, Speaker of the MSMS House of Delegates, was guest speaker on the convention program of the Michigan Hospital Association in Grand Rapids on November 9. Dr. Livesay appeared on a panel entitled, "Who Can Look to Whom for What" under the general theme of "Hospital Management in Cases of Community Disaster." Dr. Livesay represented the Michigan State Medical Society.



Scientific research in the last decade has brought revolutionary changes in the treatment of tuberculosis. The drugs currently used have greatly increased the effectiveness of tuberculosis treatment. However, instead of simplifying it, they have multiplied its complexities.

Research, which it is hoped may lead finally to a specific in tuberculosis treatment, continues in American laboratories. Much of the basic research is financed through Christmas Seal funds.

—Michigan Tuberculosis Association

Michigan State Medical Society

Roster, 1953

(Special Memberships are indicated as follows: "E" for Emeritus Members; "L" for Life Members; "R" for Retired Members; "A" for Associate Members; "M" for Military Members; all others are Active Members)

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Corkill, C. C.....Douglas
Dickinson, Clyde A.....Wayland
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Goude, A. G. 1st Lt. (MC) (M)....81st Air Base Sqdn., Greater Pittsburgh Airport, Caraopolis, Penna.
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Johnson, H. H.....Wayland
Kromer, Robert A.....Wayland
Mahan, James E.....402 Trowbridge St., Allegan
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Miller, K. C.....Saugatuck
Mitchell, A. B.....Allegan
Ramseyer, Gladwin E.....Plainwell
Schneiter, H. E.....Allegan
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Spens, James E.....Professional Bldg., Alpena
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Leva, John B.....312 Fidelity Bldg., Benton Harbor
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Polansky, Sanford.....84 W. Main St., Benton Harbor
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Rague, P. O.....Mercy Hospital, Benton Harbor
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Reagan, Robert E.....190 Michigan St., Benton Harbor
Rice, Franklyn A.....324 No. Fourth St., Niles
Rice, Franklyn G.....324 No. Fourth St., Niles
Richmond, D. M.....314½ State St., St. Joseph
Ruth, J. Griswold.....190 Washington, Benton Harbor
Skinner, James (M).....922 Main St., St. Joseph
Sowers, Bouton F.....210 Fidelity Bldg., Benton Harbor
Strayer, John W.....107 N. Second St., Niles
Strick, Marvin H.....311 Fidelity Bldg., Benton Harbor
Swingle, Alvin J.....84 W. Main, Benton Harbor
Thorup, D. W.....610 Fidelity Bldg., Benton Harbor
Urist, Maurice D.....454 Pipestone, Benton Harbor
Vastine, Russell J., Jr.....113 N. Portage, Buchanan
Westervelt, H. O.....239 Pipestone St., Benton Harbor
Winegar, A. C.....190 Michigan, Benton Harbor
Woodford, Hackley E.....191 Michigan, Benton Harbor

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Andrews, Frank A.....Box 148, Coldwater
Bailey, James E., Jr.....292 E. Chicago St., Coldwater
Beck, Perry C.....235 N. Walker St., Bronson
Bien, Walter J.....Coldwater
Culver, Bert W. (L).....78 Division, Coldwater
Culver, Dean T.....78 Division, Coldwater
Fraser, R. J.....22 W. Pearl St., Coldwater

Gomley, Henry C.....108 E. Chicago, Bronson
Harris, D. M.....35 S. Sprague St., Coldwater
Heffelfinger, J. C.....292 E. Chicago St., Coldwater
Leitch, R. M.....304 N. Broadway, Union City
McGinnis, H. J.....P. O. Box 148, Coldwater
McLain, R. W. (L).....37 Janoah Ave., Battle Creek
Meier, H. J.....87 W. Pearl St., Coldwater
Mooi, H. R.....292 E. Chicago St., Coldwater
Moss, H. L.....292 E. Chicago St., Coldwater
Nettleman, W. E.....87 W. Pearl St., Coldwater
Olmstead, Kenneth L.....131 N. Hanchett St., Coldwater
Rees, Kendall B.....Box 148, Coldwater
Rennell, E. J.....Box 148, Coldwater
Thomas, J. A.....18 N. Monroe St., Coldwater
Wade, R. L. (L).....116 E. Chicago St., Coldwater
Walton, N. J.....61 E. Chicago St., Quincy
Weidner, H. R.....50 Division St., Coldwater

CALHOUN COUNTY

Adams, Ernest F., Maj. (MC) (A)
Percy Jones Army Hospital, Battle Creek
Albright, Arnold A., Col. (A).....
Percy Jones General Hospital, Battle Creek
Amos, Norman H.....1704 Wolverine Tower, Battle Creek
Anderson, Harold E.....501 Post Bldg., Battle Creek
Ashby, John, Maj. (MC) (M)
Percy Jones Army Hospital, Battle Creek
Barden, Stuart P.....
Leila Y. Post Montgomery Hosp., Battle Creek
Baribeau, Roy H.....531 Post Bldg., Battle Creek
Beatty, George L., Col. (MC) (A).....
Percy Jones Army Hospital, Battle Creek
Becker, Harry F.....Route 3, Box 303A, Battle Creek
Beuker, Herman.....120 E. Mich. Ave., Marshall
Bodine, Harold R.....
716 Mich. Nat'l Bank Bldg., Battle Creek
Bonifer, Phillip P.....1008 Wolverine Tower, Battle Creek
Brainard, C. W.....1002 Security Bk. Bldg., Battle Creek
Brown, Robert W.....140 Capital Ave. N.E., Battle Creek
Calloway, N. O., Maj (MC) (M).....
Percy Jones Army Hospital, Battle Creek
Campbell, Alice F.....103 E. Mulberry St., Albion
Campbell, Jack....1015 Security Bk. Bldg., Battle Creek
Campbell, Richard J.....
140 Capital Ave. N.E., Battle Creek
Capron, Manley J.....618 Post Bldg., Battle Creek
Chandler, Edward M.....
1407 Security Bank Bldg., Battle Creek
Chynoweth, W. R.....207 Post Bldg., Battle Creek
Colquhoun, Graham F.....
401 Security Tower, Battle Creek
Cooper, J. E. (L).....298 W. Van Buren, Battle Creek
Curry, Robert K.....Homer
Diamante, Paul J.....1704 Wolverine Tower, Battle Creek
Dickson, A. R.....1002 Security Bank Bldg., Battle Creek
Dodge, Warren M., Jr.....
1207 Wolverine Tower, Battle Creek
Fairbanks, Stephen.....306 S. Superior, Albion
Ferazzi, Patrick S.....140 Capitol Ave. N.E., Battle Creek
Finch, D. L.....719 Capital, S.W., Battle Creek
Forsyth, J. E.....217½ S. Superior St., Albion
Fraser, Robert H.....1112 Sec. Bank Bldg., Battle Creek
Funk, L. D.....133 W. Burr Oak, Athens
Gething, Joseph W. (L).....
803 Security Bank Bldg., Battle Creek
Getz, Raymond J., Lt. Col. (MC) (A).....
Percy Jones Army Hospital, Battle Creek
Gilfillan, Margery J. (L).....
Battle Creek San., Battle Creek
Gorsline, C. S. (L).....85 Orchard Place, Battle Creek
Graubner, F. L.....Marshall
Hansen, E. L.....216 North Ave., Battle Creek
Hansen, Harvey C.....417 Post Bldg., Battle Creek
Haughey, Wilfrid (L).....610 Post Bldg., Battle Creek
Heald, C. W. (L).....291 W. Michigan, Battle Creek
Henderson, Philip M.....109 West Erie St., Albion
Herzer, Henry A. (L).....208 Irwin Ave., Albion
Hibbs, Donald K.....622 Post Bldg., Battle Creek
Holtom, B. G.....815 Security Bank Bldg., Battle Creek
Hoyt, A. A. (L)....612 Security Bank Bldg., Battle Creek
Hubly, James W.....
1407 Security Nat. Bank Bldg., Battle Creek
Humphrey, A. A.....914 Security Bk Bldg., Battle Creek
Humphrey, A. E.....122 N. Madison, Marshall
Jeffrey, J. R.....Battle Creek San., Battle Creek
Jones, Aubrey H. (A)....Veterans Hospital, Fort Custer
Jones, T. K.....118 W. Green St., Marshall
Keagle, Leland R.....196 North Ave., Battle Creek
Keeler, K. B.....205½ S. Superior St., Albion
Kelleher, George T.....613 Post Bldg., Battle Creek
Kimball, A. S., Jr.....196 Capitol Ave. N.E., Battle Creek
Kinde, M. R.....258 Champion St., Battle Creek
Kingsley, Paul C.....1407 Security Bk. Bldg., Battle Creek
Knapp, Nettie A. E.....Battle Creek San., Battle Creek
Kolvoord, Theodore..505 Security Bk. Bldg., Battle Creek
LaFrance, N. Francis (A).....Vet. Hospital, Fort Custer
Lam, Francis L.....408½ Capitol S.W., Battle Creek
Lancaster, Vance B.....1206 Security Tower, Battle Creek
Levy, Joseph, Jr.....1208 Wolverine Tower, Battle Creek
Lewis, W. B.....367 Champion, Battle Creek
Lowe, Kenneth H...401 Security Bk. Bldg., Battle Creek
Lowe, Stanley T.....1007 Security Bk. Bldg., Battle Creek
MacGregor, Archibald E. (L).....
1510 Security Bk. Bldg., Battle Creek
Mantz, Frank A., Lt. Col. (MC) (A).....
Percy Jones Army Hospital, Battle Creek
McCuaig, Alfred.....719 Capital, S.W., Battle Creek
McNair, Lawrence N.....205½ S. Superior St., Albion
Medinets, Howard E. (A).....
500 Melrose Place, South Orange, N. J.
Meister, F. O.....806 Security Bk. Bldg., Battle Creek
Melges, Fred J.....1506 Security Bk. Bldg., Battle Creek
Mercer, C. M.....512 Mich. Nat. Bk. Bldg., Battle Creek
Morrison, Donald B.....719 Capital, S.W., Battle Creek
Mowrey, F. H., Col. (MC) (M).....
Percy Jones Army Hospital, Battle Creek
Mullenmeister, Hugh F...275 Capital N.E., Battle Creek
Mustard, Russell L.....1407 Sec. Bk. Bldg., Battle Creek
Parkinson, Charles E.....Leila Post Hosp., Battle Creek
Passino, James W. (A).....
Leila Y. Post Hospital, Battle Creek
Patrick, Gilbert T.....505 Sec. Bk. Bldg., Battle Creek
Pearson, Donald J.....302 Post Bldg., Battle Creek
Pfeffer, John E., Lt. Col. (MC) (A).....
Percy Jones Army Hospital, Battle Creek
Power, J. R.....140 Capital N.E., Battle Creek
Putman, Willard N. (L).....528 Post Bldg., Battle Creek
Robbert, John.....1407 Sec. Bk. Bldg., Battle Creek
Roberts, E. H.....Am. Legion Hospital, Battle Creek
Robins, Hugh B.....237 Fremont, Battle Creek
Rorich, Wilma Weeks.....
166 Capitol Ave. N.E., Battle Creek
Rosenfeld, J. E.....158 Capitol. N.E., Battle Creek
Royer, Clark W.....1508 Wolverine Tower, Battle Creek
Rowan, Russell C.....205½ S. Superior, Albion
Schwarz, Frank W.....31 Orchard Place, Battle Creek
Sharp, A. D.....308 S. Superior, Albion
Shellenberger, Herbert M...108½ W. Michigan, Marshall
Shipp, Leland P.....1414 Sec. Bk. Bldg., Battle Creek
Sibilsky, A. C.....900 Wolverine Tower, Battle Creek
Simpson, Robert S...1507 Wolverine Tower, Battle Creek
Slagle, George W.....140 Capitol N.E., Battle Creek
Sleight, James D.....401 Sec. Bk. Bldg., Battle Creek
Stadle, Wendell H.....607 Jennings Landing, Battle Creek
Stiefel, Richard S...1407 Security Bk. Bldg., Battle Creek
Strohmenger, Frank J.....400½ S. Superior St., Albion
Swartz, George K.....Battle Creek San., Battle Creek
Tannenholz, Harold S...1614 Sec. Bk. Bldg., Battle Creek
Taylor, Clifford B.....308½ S. Superior St., Albion
Tazelaar, M. A.....219 N. Madison, Marshall
Teter, Lloyd F. (A).....Leila Post Hosp., Battle Creek

Upson, W. O. (L).....422 S. Freeman, Oceanside, Calif.
VanderVoort, Wm. V. (L).....
Battle Creek San., Battle Creek
Verity, Lloyd E.....806 Sec. Bk. Bldg., Battle Creek
Waide, Margaret E.....Community Hosp., Battle Creek
Walker, Charles S.....709 W. Van Buren, Battle Creek
Walters, John F.....41 North Washington, Battle Creek
Wencke, Carl G.....1015 Sec. Bk. Bldg., Battle Creek
Wiley, Norman H., Col. (MC) (A).....
Percy Jones Army Hospital, Battle Creek
Winslow, Sherwood B.....612 Post Bldg., Battle Creek
Worgess, Duane R.....45 Territorial Rd. W., Battle Creek
Wu, Jack Foy.....Am. Legion Hospital, Battle Creek
Yannitelli, S. A.....A. S. Kimball San., Battle Creek
Young, John J., Lt. Col. (MC) (A).....
Percy Jones Army Hospital, Battle Creek
Zheutlin, Bertram.....50 Adams St., Battle Creek
Zindler, George A.....1206 Sec. Tower, Battle Creek

CASS COUNTY

Adams, Uriah M.....Marcellus
Clary, Rudolph I.....Dowagiac
Comstock, L. D. Jr.....216½ S. Front St., Dowagiac
Everett, D. W.....Edwardsburg
Hickman, J. K.....212½ S. Front, Dowagiac
Loupee, George E.....Dowagiac
Loupee, S. L. (L).....Dowagiac
Newsome, O. E.....R.F.D. No. 3, Cassopolis
Pierce, K. C.....140½ S. Front, Dowagiac
Zwergel, E. H.....Cassopolis

CHIPPEWA-MACKINAC COUNTIES

Bandy, Festus C. (R).....Franklin Manor, Sarasota, Fla.
Blair, Herbert M.....300 Court St., Sault Ste. Marie
Blue, J. J.....Cedarville
Clausen, C. H.....300 Court St., Sault Ste. Marie
Conrad, G. A. (E).....521 Ashmun, Sault Ste. Marie
Cowan, Donald A.....140 Spruce St., Sault Ste. Marie
Finlayson, D. D.....309 Ashmun, Sault Ste. Marie
Goddard, G. B.....Pickford
Goldberg, A. H.....301 Ashmun St., Sault Ste. Marie
Hagele, Marie A.....300 Court St., Sault Ste. Marie
Harrington, H. M.....519 Ashmun, Sault Ste. Marie
Hamel, Herbert E.....St. Ignace
Howe, D. C.....300 Court St., Sault Ste. Marie
Howe, Gertrude E.....300 Court St., Sault Ste. Marie
Mackie, T. B.....300 Court St., Sault Ste. Marie
McBryde, L. M.....Masonic Bldg., Sault Ste. Marie
Mertaugh, W. F.....Cen. Sav. Bk. Bldg., Sault Ste. Marie
Montgomery, B. T.....309 Ashmun, Sault Ste. Marie
Rhind, E. S.....300 Court St., Sault Ste. Marie
Scott, D. F.....300 Court St., Sault Ste. Marie
Solomon, Joseph H.....Mackinac Island
Trapasso, T. J.....300 Court St., Sault Ste. Marie
Venier, A. G.....519 Ashmun St., Sault Ste. Marie
Wallen, L. J.....409 Ashmun St., Sault Ste. Marie
Willison, Clayton (E).....
Cen. Sav. Bk. Bldg., Sault Ste. Marie
Yale, I. V. (L).....200 Ashmun St., Sault Ste. Marie

CLINTON COUNTY

Bennett, George W.....Elsie
Cook, Bruno C.....Westphalia
Elliott, Bruce R.....Ovid
Fillinger, Wells B.....Ovid
Foo, Charles T.....St. Johns
Grost, J. M.....210 E. Walker, St. Johns
Henthorn, A. C.....RFD No. 3, St. Johns
Kirker, J. G.....Fowler
Luton, F. E. (E).....St. Johns
McWilliams, W. B.....Maple Rapids
Russell, Sherwood R.....St. Johns
Sheline, V. L.....Ashley
Slagh, Earl M.....Elsie
Smith, F. W.....St. Johns
Stephenson, W. F.....510 E. Walker St., St. Johns
Stoller, Paul F.....308 N. Mead St., St. Johns

DELTA-SCHOOLCRAFT COUNTIES

Anderson, F. C.....First Nat. Bk. Bldg., Escanaba
Bernier, A. B.....Nahma
Boyce, D. H.....1007 Ludington, Escanaba
Brenner, Ervin J.....Manistique
Carlton, A. J. (L).....1103 Ludington, Escanaba
Chenoweth, Nancy R. (E).....Peterborough, Ont., Can.
Defnet, Harry J.....121 S. Eleventh St., Escanaba
Dehlin, J. R.....1102 Wisconsin Ave., Gladstone
Frenn, Nathan J.....Bark River
Fyvie, James H.....202 S. Cedar, Manistique
Groos, H. Q.....1015 S. First, Escanaba
Groos, L. P.....1015 S. First, Escanaba
Harrison, William C.....403 S. Seventh St., Escanaba
Hult, O. S.....1005 Delta Ave., Gladstone
Kee, C. E.....1102 Wisconsin Ave., Gladstone
LeMire, D. F.....1104 S. First, Escanaba
Lemire, W. A.....1106 S. First, Escanaba
Lindquist, N. L.....205 S. 10th St., Escanaba
McInerney, T. A.....1221 Ludington, Escanaba
Miller, A. H.....904 Wisconsin, Gladstone
Ryde, R. E.....1219 Ludington, Escanaba
Walch, J. J.....1103 Ludington, Escanaba
Wehner, Merle E.....Manistique

DICKINSON-IRON COUNTIES

Addison, E. R.....412 Superior, Crystal Falls
Alexander, W. H.....Com. Nat. Bk. Bldg., Iron Mountain
Anderson, Donald T.....408 Hamilton Ave., Kingsford
Boyce, G. H.....First Nat. Bk. Bldg., Iron Mountain
Browning, J. L.....212 East B St., Iron Mountain
Cooper, C. A.....230 Washington Ave., Stambaugh
Frederickson, Geron.....826 East "A" St., Iron Mountain
Haight, H. H. Capt. (MC).....5711 Glouster Rd.,
Woodacres, Wash., D. C.
Hayes, Willard N.....716 Main St., Norway
Huron, W. H.....107 East "A" St., Iron Mountain
Irvine, L. E.....326 W. Genesee, Iron River
Kofmehl, Wm. J.....Stambaugh
McCormack, Edward.....Niagara, Wis.
McEachran, Hugh D.....401 East "C" St., Iron Mountain
Menzies, Clifford G.....416 W. Brown, Iron Mountain
Palm, E. T.....412 Superior St., Crystal Falls
Retallack, R. C.....326 W. Genesee, Iron River
Schmutzler, W. A.....373 Woodward, Iron Mountain
Schroeder, J. M.....1115 Stockbridge, Iron Mountain
Silas, Ralph M.....3144 Park Ave., Minneapolis, Minn.
Smith, Donald R.....105 East A St., Iron Mountain
Steinke, C. G.....517 Stephenson, Iron Mountain

EATON COUNTY

Arner, Fred L.....231½ N. Main St., Bellevue
Brown, B. P.....116 Pearl St., Charlotte
Carothers, Daniel J.....201½ S. Cochran St., Charlotte
Cook, J. Maxwell.....
Eaton Co. Health Dept., 314 S. Cochran St., Charlotte
DeLand, C. L.....121 S. Main St., Olivet
Engle, P. H.....121 S. Main St., Olivet
Hannah, Harry W.....236 S. Cochran St., Charlotte
Harrod, Gordon R.....Grand Ledge
Hoffer, W. E.....115 S. Washington, Charlotte
Imthun, E. F.....113 E. Jefferson, Grand Ledge
Johnson, Robert C. (M).....Charlotte
Meinke, A. H.....101 W. Plain St., Eaton Rapids
Meinke, Richard K. (M).....Eaton Rapids
Myers, Albert W.....Potterville
Sevener, Lester G.....236 S. Cochran St., Charlotte
Van Ark, Bert.....101 W. Plain St., Eaton Rapids
Van Ark, H. F.....101 W. Plain St., Eaton Rapids
Whitlock, Stanley C.....Dimondale
Willits, C. O.....201 W. Seminary, Charlotte

GENESEE COUNTY

Adams, Burnell H.....2002 E. Court St., Flint
Adams, Chester H.....310 E. First St., Flint
Anderson, H. H.....11280 N. Saginaw, Mt. Morris
Andrews, Nelson A. C.....310 E. Main St., Flushing
Anthony, George E. R.....1015 Detroit St., Flint
Backus, Glenn R.....633 Mott Foundation Bldg., Flint
Baird, W. C. (A).....1818 Ramsey Blvd., Flint
Bald, Frederick W.....610 Mott Foundation Bldg., Flint
Barbour, Fleming A.....1439 Mott Foundation Bldg., Flint
Baske, Franklin W.....923 Maxine St., Flint
Bateman, L. G.....1928 Lewis, Flint
Benson, J. C., Sr. (L).....727 Clifford St., Flint
Benson, John C., Jr.....709 Genesee Bk. Bldg., Flint
Berman, Harry.....3309 Fenton Rd., Flint
Bernstein, Eli N.....409 Kresge Bldg., Flint
Beyer, George D.....145 Vienna St., Clio
Bishop, D. L.....2226 Detroit St., Flint
Blakeley, A. C.....
Vet. Admin., Med. Dept., 310 E. Jefferson, Detroit
Bogart, Leon M.....1008 Genesee Bk. Bldg., Flint
Boles, William P.....714 Beach St., Flint
Bradley, Robert M.....420 Genesee Bk. Bldg., Flint
Brain, R. G.....509 First Nat'l Bk. Bldg., Flint
Branch, Hira E.....821 Mott Foundation Bldg., Flint
Brasie, Donald R.....907 Citizens Bk. Bldg., Flint
Briggs, Guy D.....225 Genesee Bk. Bldg., Flint
Bruce, William W.....5045 Morrish Road, Swartz Creek
Bryant, Donald R.....621 Mott Foundation Bldg., Flint
Burkett, L. V.....411 Court House, Flint
Buchanan, W. F.....104 W. Caroline St., Fenton
Burnell, Max R.....3301 Westwood Parkway, Flint
Caster, E. Wilbur (L)....13312 Wales, Huntington Woods
Chambers, Myrton S.....839 Mott Foundation Bldg., Flint
Charters, John H. (E).....11089 Fenton Road, Flint
Clark, Clifford P. (R).....
515 Villa Bella Ave., Coral Gables, Fla.
Collins, James I.....902 Stockdale, Flint
Colwell, C. W.....706 Citizens Bk. Bldg., Flint
Connell, John T.....305 Dryden Bldg., Flint
Conover, George V.....420 Genesee Bk. Bldg., Flint
Conover, McClellan B.....312 Paterson Bldg., Flint
Conover, T. Sidney.....420 Genesee Bk. Bldg., Flint
Cook, Henry.....326 Genesee Bk. Bldg., Flint
Covert, Floyd L. (L).....116 Lord St., Gaines
Craig, William G.....717 Mott Foundation Bldg., Flint
Credille, Barney A.....813 Genesee Bk. Bldg., Flint
Curry, George J.....402 Genesee Bk. Bldg., Flint
Curtin, John H.....A.C. Spark Plug Plant, Flint
Cutler, G. Campbell.....2415 Detroit St., Flint
Dawson, Ralph E.....804 Metropolitan Bldg., Flint
DelZingro, Nicholas.....Davison
Denholm, Nan H.....811 Mott Foundation Bldg., Flint
Dickstein, Bernard,.....201 Dryden Bldg., Flint
Dimond, E. G.....209 Genesee Bk. Bldg., Flint
Dodds, Frederick E.....1336 Lewis St., Flint
Dorsey, Philip W.....220 Genesee Bk. Bldg., Flint
Drewyer, Glen E.....907 Welch Blvd., Flint
Durham, Lowell J...11820 N. Saginaw Road, Mt. Morris
Eichhorn, Ernest M.....1112 Mott Foundation Bldg., Flint
Eickhorst, Thomas N.....210 E. Court St., Flint
Elliott, Hardie B.....409 Dryden Bldg., Flint
Engelman, R. M.....1013 Mott Foundation Bldg., Flint
Ettinger, Ralph D.....111 S. Walnut St., Fenton
Farhat, Maynard M.....620½ W. Court St., Flint
Fee, Manson G.....311 Kresge Bldg., Flint
Finkelstein, Theodore.....1415 Broadway, Flint
Flynn, Southard T.....1121 Mott Foundation Bldg., Flint
Foley, Sydney I.....2217 Mason St., Flint
Fuller, Harvey T.....Mt. Morris
Gelenger, S. M., Lt. Col. (MC) (M).....
2125 Detroit St., Flint
Gleason, N. A.....1310 Mott Foundation Bldg., Flint
Goering, George R.....519 Dryden Bldg., Flint
Golden, H. Maxwell.....218 E. Court, Flint
Goodfellow, B. T. (L).....506 Page St., Flint
Gorne, Saul S.....400 F. P. Smith Bldg., Flint
Grady, Donald R.....5009 N. Saginaw St., Flint
Griffin, Ernest P., Jr.....621 Mott Foundation Bldg., Flint
Grover, H. F.....310 Dryden Bldg., Flint
Guile, Gurdon S.....1621 Dupont St., Flint
Gundry, G. L.....11736 Saginaw, Grand Blanc
Gutov, Isadore H.....607 Citizens Bk. Bldg., Flint
Hackley, Richard D.....4120 Western Road, Flint
Hague, Robert F.....210 E. Court St., Flint
Halligan, Raymond S. (L).....405 East First St., Flint
Hamady, Ruth E.....228 Welch Blvd., Flint
Hamilton, A. J.....
Fisher Body Co. No. 2, 3100 Van Syke Rd., Flint
Harrison, Leo D. (R).....1132 Woodside Drive, Flint
Hauser, Frederick V...1012 Mott Foundation Bldg., Flint
Hawkins, James E.....1226 Leith St., Flint
Hing, William.....326 Stockdale St., Flint
Hiscock, Harold H.....1315 Mott Foundation Bldg., Flint
Hooper, Kendall.....714 Beach St., Flint
Houston, James (L) .....Swartz Creek
Hubbard, Wm. B.....302 Patterson Bldg., Flint
Hufton, W. L.....721 W. Sixth Ave., Flint
Hurd, Clayton E.....First and Walnut St., Fenton
Jermstad, Robert J.....633 Mott Foundation Bldg., Flint
Johnson, Arthur H.....3219 North St., Flint
Johnson, Frank D.....312 Patterson Bldg., Flint
Johnson, Raymond E.....907 Welch Blvd., Flint
Jones, Lafon.....1004 Genesee Bk. Bldg., Flint
Jordan, P. H.....302 W. Second Ave., Flint
Judd, A. E.....2315 Davison Road, Flint
Kaleta, Edward J.....3101 N. Saginaw St., Flint
Kaufman, L. D.....4002 N. Saginaw St., Flint
Knapp, William D.....1621 Mott Fdtn. Bldg., Flint
Koop, Chester S.....2503 Detroit St., Flint
Kretchmar, Arthur H.....608 First Nat. Bldg., Flint
Kurtz, John J.....421 Dryden Bldg., Flint
Laird, James I.....10114 Main St., Goodrich
Leach, J. Leonidas.....3007 Industrial Ave., Flint
Lewis, Thomas E. (M).....Buick Motor Company, Flint
Limbach, David R...Hurley Hospital, X-Ray Dept., Flint
Livesay, Jackson E.....621 Mott Foundation Bldg., Flint
Logan, George W. (L).....Flushing
Lukens, T. John.....1327 Mott Foundation Bldg., Flint
Lyttle, Sydney N.....615 Mott Foundation Bldg., Flint
MacGregor, Delbert M.....701 Dayton W., Flint
Macksood, Joseph A.....2501 N. Saginaw St., Flint
Manwaring, John T.....1002 Citizens Bk. Bldg., Flint
McArthur, Arthur.....1539 Mott Foundation Bldg., Flint
McCabe, Margaret M.....420 Genesee Bk. Bldg., Flint

McClellan, Junius W.....Chevrolet Motor Company, Flint
McGarry, Burton G. (L)....202 E. Caroline St., Fenton
McGarry, Roy A.....418 Dryden Bldg., Flint
McKenna, Oscar W. (E).....325 Stevens St., Flint
McLeod, K. W. A.....2801 N. Saginaw St., Flint
McTaggart, David....1604 Mott Foundation Bldg., Flint
Michael, S. R.....907 Welch Blvd., Flint
Michels, Robert M. (M).....610 E. Main St., Flushing
Miller, Loren Eugene.....2645 Corunna Road, Flint
Miltich, Anthony J.....415 Dryden Bldg., Flint
Moore, Kenneth B.....1613 Mott Foundation Bldg., Flint
Moore, Wesley P.....3101½ Industrial Ave., Flint
Morrish, Ray S.....1715 Crescent Drive, Flint
Morrison, William H.....205 Perry Road, Grand Blanc
Morrissey, V. H.....101 Stockdale St., Flint
Mosier, Edward C.....115 Lake St., Otisville
Murphy, E. G.....1201 Kensington, Flint
Neiswander, P. L...Fisher Body Truck Plant, Grand Blanc
Odle, Ira D.....201 Welch Blvd., Flint
Orr, J. Walter (L).....Orrs Point, Lake Fenton, Fenton
Osher, Seymour L.....506 National Bldg., Flint
Pfeifer, Archibald C.....11610 N. Saginaw St., Mt. Morris
Phillips, Robert L.....706 Citizens Bk. Bldg., Flint
Pratz, Oliver C.....1303 Detroit St., Flint
Preston, Otto J.....Chevrolet Motor Company, Flint
Purcell, F. L.....Goodrich Hospital, Goodrich
Ragan, Russell M.....3602 Beecher, Flint
Rapport, Richard L.....715 Mott Foundation Bldg., Flint
Rawlings, J. Mott.....1601 Neome Drive, Flint
Reichard, Orill (L).....1507 Detroit St., Flint
Reid, Wells C.....Goodrich Hosp., Goodrich
Reynolds, Arthur J. (L).....910 E. Kearsley St., Flint
Rieth, George F.....1402 Davison Road, Flint
Roberts, Floyd A.....428 Thompson St., Flint
Rowe, John B.....312 Paterson Bldg., Flint
Rulney, Max.....1128½ Chevrolet Ave., Flint
Rundles, Walter Z.....304 First Nat. Bldg., Flint
Rundles, Walter Z., Jr.....304 First Nat'l Bldg., Flint
Sandberg, Russell G.....1315 Mott Foundation Bldg., Flint
Sandy, Kenneth R.....2701 Detroit St., Flint
Scavarda, Charles J.....304 First National Bldg., Flint
Schiff, B. A.....200 Sill Bldg., Flint
Schreiber, E. Oskar.....421 Kresge Bldg., Flint
Schultz, J. Stanley.....3327 Fleming Road, Flint
Schwartz, J. M.....
4300 S. Saginaw St., Fisher Body Plant No. 1, Flint
Scott, Robert D.....1215 Detroit St., Flint
Searles, Karl F.....2932 Corruna Road, Flint
Shantz, Leighton O.....1239 Mott Foundation Bldg., Flint
Shapiro, Joseph.....402 Metropolitan Bldg., Flint
Sheeran, Daniel H.....809 Genesee Bk. Bldg., Flint
Shipman, Charles W.....325 E. First St., Flint
Simoni, Lewis E.....3210 S. Dart Hwy., Flint
Sirna, A. R.....300 N. Chevrolet Ave., Flint
Sleeman, B. R.....129 E. Broad St., Linden
Smith, DeVerne C. (L).....810 Sill Bldg., Flint
Smith, Eugene C.....814 Mott Foundation Bldg., Flint
Smith, Maurice J.....2801 N. Saginaw, Flint
Sniderman, Benjamin F.....727 Beach St., Flint
Snyder, Charles E.....8042 Miller Road, Swartz Creek
Sorkin, Morris L.....718 Beach St., Flint
Sorkin, Samuel S.....718 Beach St., Flint
Sparks, Harvey V.....603 First National Bldg., Flint
Steffe, Ralph S.....610 Mott Foundation Bldg., Flint
Steinman, Floyd H.....734 Mott Foundation Bldg., Flint
Stevens, P. K.....201 Michigan Theater Bldg., Flint
Stevenson, William W.....416 Kresge Bldg., Flint
Streat, Rudolph W.....218 East 8th St., Flint
Strong, Kirk H. (M).....Buick Motor Company, Flint
Stroup, Clayton K.....2002 E. Court St., Flint
Sutherland, James K.....402 E. Third St., Flint
Sutton, Mahlon R. (L).....2110 Detroit St., Flint
Swartzendruber, Fred J...Goodrich Gen. Hosp., Goodrich
Thompson, Alvin N.....1121 Mott Foundation Bldg., Flint
Thompson, Jack W. (M).....
U. S. Naval Hosp., Jacksonville, Fla.
Thorburn, E. G.....702 Ballenger Hwy., Flint
Tofteland, Elmer H.....302 W. Third Ave., Flint
Tower, R. B.....
Genesee Co. San., 702 Ballenger Hwy., Flint
Treat, David L. (L).....1110 S. Drive, Flint
Trumble, George W. (L).....2500 S. Saginaw, Flint
Turner, Merald G.....316 Dryden Bldg., Flint
Tuuri, A. L.....Mott Clinic, Hurley Hosp., Flint
Van Harn, R. S.....Buick Motor Company, Flint
Varney, Howard L. (M).....1415 Broadway, Flint
Vary, Edwin P.....608 First National Bldg., Flint
Vaughan, Edgar J.....Linden
Wajert, Josephine A.....811 Mott Foundation Bldg., Flint
Walcott, Carver G.....Fenton
Ward, Nell M.....1139 Mott Foundation Bldg., Flint
Ware, Frank A.....514 Genesee Bank Bldg., Flint
Wark, David R.....1315 Detroit, Flint
Wentworth, John E.....1651 Chevrolet Ave., Flint
Werness, Inga W.....304 First Nat. Bk. Bldg., Flint
White, C. H.....106 River St., Fenton
White, Herbert T. (L)....504 First Nat. Bk. Bldg., Flint
Williams, William S.....
G-3398 S. Saginaw St., Grand Blanc
Willoughby, Gordon L.....5009 N. Saginaw St., Flint
Willoughby, Leslie L. (L).....1402 Davison Rd., Flint
Wills, Thomas N.....706 W. Court St., Flint
Winchester, Walter H. (L)....515 Genesee Bk. Bldg., Flint
Woughter, Harold W...1312 Mott Foundation Bldg., Flint
Wright, Donald R.....403 W. Court St., Flint
Zeis, M. G.....718 Beach St., Flint

GOGEBIC COUNTY

Albert Samuel G.....119 Suffolk St., Ironwood
Anderson, Charles E.....Bessemer
Davidson, Donald L.....200 S. Sophie St., Bessemer
Eisele, D. C.....109 E. Aurora St., Ironwood
Franck, John R.....Wakefield
Gertz, M. A.....109 E. Aurora St., Ironwood
Gingrich, W. A.....109 E. Aurora St., Ironwood
Gorilla, A. C.....210 S. Suffolk St., Ironwood
Harrington, R. R.....103 S. Suffolk, St., Ironwood
Lieberthal, M. J.....104 S. Suffolk, Ironwood
Lieberthal, Paul R.....104 S. Suffolk, Ironwood
Maccani, Wm. L.....Ironwood
Nezworski, H. T.....210 S. Suffolk, Ironwood
O'Brien, A. J.....216 E. Aurora St., Ironwood
Pinkerton, H. A.....Newport Hospital, Ironwood
Santini, F. J.....109 E. Aurora St., Ironwood
Stevens, Charles E.....216 E. Aurora St., Ironwood
Tashiro, Kiyo.....Grand View Hospital, Ironwood
Tressel, Henry A.....Wakefield
Wacek, W. H.....Grand View Hospital, Ironwood

GRAND TRAVERSE-LEELANAU-BENZIE COUNTIES

Beall, J. G.....118½ E. Front St., Traverse City
Bolan, Ellis J.....Suttons Bay
Brownson, K. N.....116 Cass, Traverse City
Brunk, C. F.....Route 1, Traverse City
Bushong, B. B.....116 Cass, Traverse City
Christie, J. W.....Northport
Duiker, Henry.....Box C, Traverse City
Ellis, Claude I.....Suttons Bay
Goodrich, Dwight R. (R).....
601 W. Front St., Traverse City
Gunderson, Edward P.....22354 Pickford Ave., Detroit 19
Haberlein, Charles R.....438 W. Front St., Traverse City
Hall, J. W.....212½ E. Front St., Traverse City
Hamilton, E. E.....530 S. Union St., Traverse City
Herkner, Mildred L.....123½ E. Front St., Traverse City
Huene, Nevin.....112 E. Front St., Traverse City

Huston, Russell R.....Elk Rapids
Hyslop, W. T.....Adult Mental Health Clinic, Houghton Street, Saginaw
Jerome, J. T.....217 S. Madison, Traverse City
Lemen, C. E.....216½ E. Front St., Traverse City
Lossman, Robert T.....Munson Hospital, Traverse City
Merritt, Harry E.....112½ E. Front St., Traverse City
Miller, Charles Scott..... Traverse City State Hospital, Traverse City
Milliken, John G.....436½ W. Front St., Traverse City
Osterhagen, H. F.....W. Bay Shore Rd., Traverse City
Osterlin, Mark F.....201 State Bk. Bldg., Traverse City
Pike, D. G.....876 E. Front St., Traverse City
Power, F. H.....116 Cass, Traverse City
Salon, Dayton D.....108½ E. Front St., Traverse City
Sheets, R. P.....Traverse City State Hosp., Traverse City
Sladek, E. F.....123 E. Front St., Traverse City
Stone, Fordyce H.....Beulah
Swartz, F. G.....301 State Bk. Bldg., Traverse City
Thacker, Fred R.....Frankfort
Thirlby, E. L. (L).....116 Cass, Traverse City
Thirlby, Richard L.....711 Second St., Traverse City
Trautman, Frederick B.....Frankfort
Van Leuven, B. H. (R).....Empire
Way, L. R. (R).....436 E. State, Traverse City
Weitz, H. L.....529 Monroe, Traverse City
Wieh, J. E.....118½ E. Front St., Traverse City
Wilcox, P. H.....526 W. 10th St., Traverse City
Zielke, I. H.....212 E. Front St., Traverse City
Zimmerman, J. G.....306 State Bk. Bldg., Traverse City

GRATIOT-ISABELLA-CLARE COUNTIES

Aldrich, Alfred L.....Ithaca
Barstow, D. K.....215 W. Saginaw St., St Louis
Barstow, W. E. (L).....215 W. Saginaw St., St. Louis
Becker, M. G.....Edmore
Bergin, Joseph H.....1437 Michigan, Alma
Budge, M. J.....1035 Jefferson, Ithaca
Burch, L. J. (E).....314 E. Broadway, Mt. Pleasant
Burt, C. E.....110 S. Pine River, Ithaca
Burt, Loren G. (M).....8th Hospital Gp., APO 994 Johnson AFB, c/o P.M., San Francisco, Calif.
Chamberlain, R. W.....610 S. College, Mt. Pleasant
Davis, L. L.....314 S. Brown St., Mt. Pleasant
Drake, Wilkie M. (E).....Breckenridge
DuBois, C. F.....Alma
Eldredge, J. H. (M).....3882nd Sch. Grp., Box 264, Gunter AFB, Montgomery, Ala.
Graham, B. J.....Wright Hotel Bldg., Alma
Hall, R. F.....805 Douglas St., Mt. Pleasant
Hammerberg, Kuno.....622 McEwan, Clare
Harrigan, W. L.....408 E. Broadway, Mt. Pleasant
Hersee, W. E.....306 College St., Mt. Pleasant
Hobbs, A. D.....120 W. Center St., St. Louis
Hoogerland, C. L.....236 N. State St., Alma
Hyslop, L. F.....612 S. Kinney St., Mt. Pleasant
Johnson, P. R.....206 S. College Ave., Mt. Pleasant
Juhnke, L. W.....1050 E. Maple St., Mt. Pleasant
Kilborn, H. F.....Ithaca
McArthur, S. C.....Clare Hospital, Clare
Oldham, E. S.....Breckenridge
Palmer, F. W.....P.O. Box 32, Mt. Pleasant
Putzig L. W.....Blanchard
Ringer, P. H.....314 S. Brown St., Mt. Pleasant
Robinson, Fred W..... Rm. 529, Med. Arts Bldg., Houston 2, Tex.
Rottschafer, J. L.....715 Center St., Alma
Silvert, Pasche P.....Vestaburg
Strange, R. H.....630 S. College, Mt. Pleasant
Waggoner, R. L.....120 W. Center St., St. Louis
Wallman, C. H.....630 State St., Alma
Wickert, L. R. (M).....U. S. Naval Ordnance Plant, Indianapolis, Ind.
Wilcox, R. A.....203 W. End St., Alma
Wilson, Earl C.....Harrison
Wolfe, K. P.....427 W. Superior, Alma
Wood, C. B.....RFD No. 2, Mt. Pleasant

HILLSDALE COUNTY

Bates, M. P.....108 S. Manning, Hillsdale
Davis, L. A.....Camden
Day, Luther W.....112 E. Chicago St., Jonesville
Hanke, George R.....RFD, Osseo
Hodge, C. L.....Reading
Hughes, Henry F. (L).....Hillsdale
MacNeal, John A.....76 N. Manning St., Hillsdale
Martindale, E. A. (L).....Hillsdale
Mattson, H. F.....32 S. Broad St., Hillsdale
McFarland, O. G.....North Adams
Michel, William O.....39 North St., Hillsdale
Miller, Harry C. (L)..... 4760 Panorama Drive, San Diego 3, Calif.
Peterson, Carl A.....32 S. Broad, Hillsdale
Sawyer, W. W.....61 N. Howell St., Hillsdale
Stein, Arthur J.....144 Budlong St., Hillsdale
Strom, Arthur W.....32 S. Broad St., Hillsdale
Trapp, Donald G.....32 S. Broad St., Hillsdale
Wiggins, Ira W.....205 East St., Jonesville

HOUGHTON-BARAGA-KEWEENAW COUNTIES

Aldrich, A. B.....503 Sheldon Ave., Houghton
Aldrich, L. C.....1609 E. Houghton Ave., Houghton
Bourland, P. D. (L).....134½ Calumet Ave., Calumet
Brewington, G. F. (E)..309-A N. 6th St., Las Vegas, Nev.
Burke, John J.....10 Duncan Ave., Hubbell
Gregg, W. T. S. (E)..... Gerry's Landing, Cambridge 38, Mass.
Hillmer, Raymond E.....1 Algomah, Painesdale
Hosking, F. S.....328 Florida St., Laurium
Janis, Anton J.....East Hancock, Hancock
King, Sidney.....St. Joseph Hospital, Hancock
King, William T. (E).....Ahmeek
Kirton, Job R. W. (E).....106 Sixth St., Calumet
Kolb, F. E. .....128 Calumet, Calumet
LaBine, Alfred.....1019 College Ave., Houghton
Larson, Forrest W.....322 Sheldon Ave., Houghton
Lepisto, V. E.....414 Hecla St., Laurium
Levin, Simon (E).....1209 College Ave., Houghton
Manthei, W. A.....5426 Calumet, Lake Linden
Murphy, P. J.....130 Calumet, Calumet
Potter, E. C.....Baraga County Hospital, L'Anse
Repola, Kenneth L.....723 Seventh St., Laurium
Roberts, M. D. (L).....404 Hancock St., Hancock
Roche, Andrew M.....221 Fifth St., Calumet
Sloan, P. S.....214 Clark St., Houghton
Smith, Charles R.....E. White Street, Hancock
Stern, I. D.....220 Hubbell, Houghton
Wickliffe, J. T. P.....1167 Calumet Ave., Calumet
Winkler, Henry J.....L'Anse

HURON COUNTY

Bentley, M. D., Capt., MC (M)....Brooke Army Hospital Annex IV, Gen. Deliv., Ft. Sam Houston, Tex.
Dixon, Ralph C.....Pigeon
Gettel, Roy R.....Bad Axe
Herrington, Charles I.....Bad Axe
Herrington, Willet J.....Bad Axe
Monroe, Duncan J. (L).....Elkton
Oakes, C. W.....Harbor Beach
Ritsema, John.....Sebewaing
Scheurer, Clare A.....Pigeon
Sorensen, Maurice G.....Kinde
Steinhardt, Edward E.....Elkton
Strempek, W. F.....Pigeon
Turner, Phillip R.....Harbor Beach
Weiss, Arno W.....Bad Axe
Wible, Charles F.....Sebewaing

INGHAM COUNTY

Alexander, Reuben G.....301 Seymour, Lansing
Altland, J. K.....Mich. Dept. of Health, Lansing
Asselin, David C.....503 Amer State Bk. Bldg., Lansing
Badgley, W. O.....624 N. Capitol Ave., Lansing
Baker, Arthur G.....Michigan Dept. of Health, Lansing
Bartholomew, Henry S. (R).....Harbor Beach
Bates, R. C.....1820 E. Michigan, Lansing
Bauer, Theodore I.....808 Olds Tower, Lansing
Behen, William C.....535 S. Capitol, Lansing
Bellinger, E. G. (L).....114 W. Lenawee, Lansing
Bevez, Frank L.....930 N. Washington Ave., Lansing
Black, Charles E.....529 W. Grand River, Williamston
Black, Gertrude C.....529 W. Grand River Ave., Williamston
Bowersox, R. J.....108 Division, East Lansing
Bradford, C. W.....419 S. Walnut, Lansing
Breakey, Robert S.....1211 Bk. of Lansing Bldg., Lansing
Brenner, J. J.....122 W. Hillsdale, Lansing
Brown, Fred W., Jr.....536 Tussing Bldg., Lansing
Brubaker, Earl W.....1406 Bk. of Lansing Bldg., Lansing
Brucker, Karl B.....610 S. Walnut, Lansing
Burhans, John G.....Oldsmobile Div. G.M., Lansing
Burhans, R. A.....810 Olds Tower, Lansing
Calomeni, Anthony D.....309 Seymour, Lansing
Carr, Earl I.....300 W. Ottawa, Lansing
Chaskes, Marion Iddings....226 S. Capitol Ave.. Lansing
Cheney, William D.....412 La Salle Blvd., Lansing
Christian, L. G.....108 E. St. Joseph, Lansing
Clark, W. E.....136 W. Ash St., Mason
Clinton, George R.....136 W. Ash St., Mason
Cook, R. J.....2601 S. Cedar St., Lansing
Cope, H. E.....Michigan Dept. of Health, Lansing
Cordes, Jerome F. (A)....University Hospital, Ann Arbor
Corneliuson, Goldie B.....Mich. Dept. of Health, Lansing
Cowan, J. A.....825 Touraine, East Lansing
Crandall, Clarence.....1964 S. Cedar St., Holt
Cross, Frank S.....426 W. Ottawa, Lansing
Cummings, G. D.....Mich. Dept. of Health, Lansing
Darling, L. H.....115 W. Hillsdale, Lansing
Dean, Carleton.....252 Hollister Bldg., Lansing
De Kleine, William.....301 Seymour St., Lansing
DeVries, C. L. F.....320 Townsend, Lansing
Dexter, Mary J.....229 E. Maple, Mason
Doyle, C. P. (E).....1408 Bank of Lansing Bldg., Lansing
Drolett, Donald J.....609 N. Washington Ave., Lansing
Drolett, Fred J.....900 Prudden Bldg., Lansing
Drolett, Lawrence A.....903 Prudden Bldg., Lansing
Dunn, F. M.....301 Seymour, Lansing
Ellis, Bertha (R).....P. O. Box 216, Port Blakely, Wash.
Ellis, C. W. (L).....P. O. Box 216, Port Blakely, Wash.
Feeney, Kenneth J.....1908 Olds Tower, Lansing
Finch, Russell L.....420 S. Walnut, Lansing
Folkers, Leonard M.....234 Michigan Ave., East Lansing
Fortino, S. P.....502 Bauch Bldg., Lansing
Fosget, Wilbur W.....303 Bauch Bldg., Lansing
Foust, Earl H. (L).....P. O. Box 422, Eustis, Fla.
French, Horace L.....301 Seymour, Lansing
Fryer, Douglas H.....207 City Hall Bldg., Lansing
Gardner, Carl A.....547 E. Grand River Ave., E. Lansing
Gardner, C. B.....320 Townsend St., Lansing
Garlinghouse, A. John.....215 N. Walnut, Lansing
Goldner, Roy E.....1318½ S. Washington, Lansing
Hackman, Pearl E.....4455 Turney Road, Cleveland, O.
Harris, Herbert W.....609 N. Washington, Lansing
Harrison, W. H.....834 W. St. Joseph, Lansing
Harrold, J. F.....420 W. Ottawa, Lansing
Hart, L. C.....119 W. Lenawee, Lansing
Hayes, R. E.....1101½ S. Washington Ave., Lansing
Hayford, William D.....609 N. Washington, Lansing
Heald, Gordon H.....1107 Bank of Lansing Bldg., Lansing
Heckert, Frank B.....1105 Bank of Lansing Bldg., Lansing
Heckert, J. K.....1105 Bank of Lansing Bldg., Lansing
Heerdt, Mark E.....Grand River & Grandview, Okemos
Henry, L. L.....326 Townsend, Lansing
Hermes, E. J.....310 Townsend, Lansing
Hersey, E. Freeman (A)....2800 W. Grand Blvd., Detroit
Hersey, Margaret S.....2800 W. Grand Blvd., Detroit
Heustis, Albert E.....Michigan Dept. of Health, DeWitt Road, Lansing
Himmelberger, R. J.....320 Townsend, Lansing
Hockman, T. A.....234 Michigan Ave., East Lansing
Holland, Charles F.....166 Orchard St., East Lansing
Huggett, Clare C.....122 W. Grand River, Lansing
Hunt, O. R.....215 N. Walnut St., Lansing
Hurth, M. S.....1717 Jerome St., Lansing
Isbister, J. L.....Michigan Dept. of Health, DeWitt Road, Lansing
Jacob, S. Sprigg.....201 Ann St., East Lansing
Johnson, Henry T., Lt. USNR (M).....132-A California Ave., Forrestal Village, North Chicago, Ill.
Johnson, Kenneth H.....1116 Olds Tower, Lansing
Johnston, D. W. (M).....Address unknown
Jones, Francis, Jr.....716 Olds Tower Bldg., Lansing
June, R. C. (M).....Address Unknown
Kahn, David.....401 American State Bank Bldg., Lansing
Kalmbach, R. E.....301 Seymour St., Lansing
Keim, C. D.....502 Bauch Bldg., Lansing
Kent, Edith Hall.....311 S. Pine, Lansing
Kent, Herbert K.....311 S. Pine, Lansing
Kenyon, Fanny H.....Mich. Dept. of Health, Lansing
Klunzinger, Willard R.....420 W. Ottawa, Lansing
Kraft, L. C.....209 S. Main, Leslie
Landy, G. R.....226 S. Walnut, Lansing
Lange, Philip F.....1923 S. Cedar St., Lansing
Lanting, Helen E.....611 Ardson, East Lansing
Laughead, Charles A...MSC Health Center, East Lansing
Lauzun, Virginia.....309 W. Main, Lansing
LeDuc, Don M.....310 Townsend St., Lansing
Leeder, Fred S.....Mich. Dept. of Health, Lansing
LeVett, Harry L.....117½ W. Shiawassee, Lansing
Loree, Maurice C.....120 W. Hillsdale, Lansing
Lucas, T. A.....426 W. Ottawa, Lansing
Ludlum, L. C.....1126 W. Saginaw St., Lansing
Marriner, E. F.....4341 W. Delhi Road, Holt
Martin, W. O.....4765 Nakoma, Okemos
McConnell, E. G. (R).....212 Leslie St., Lansing
McCorvie, C. Ray.....129 E. Grand River, E. Lansing
McCoy, Earl M. (R).....Grand Ledge
McElmurry, Leland R.....209 N. Walnut, Lansing
McGillicuddy, Oliver B.....1816 Olds Tower, Lansing
McGillicuddy, R. J.....300 W. Ottawa, Lansing
McIntyre, J. E.....600 S. Grand Ave., Lansing
McNamara, B. E.....326 Townsend, Lansing
McNamara, William E.....326 Townsend, Lansing
Meade, Robert J.....1023 E. Michigan Ave., Lansing
Meade, William H.....1023 E. Michigan, Lansing
Mercer, W. E.....304 Evergreen, East Lansing
Meyer, H. R. (R).....2117 Teel Ave., Lansing

Molina, Elba.....1512 E. Michigan, Lansing
Monfort, Robert N.....Health Center, MSC, E. Lansing
Morelli-Pando, Lorenzo.....535 S. Capital Ave., Lansing
Morris, M. K.....1023 E. Michigan Ave., Lansing
Morrow, R. J.....409 W. Ottawa, Lansing
Neering, James C.....St. Lawrence Hosp., Lansing
Ochsner, P. J.....Fisher Body Plant, Lansing
Paine, W. G.....108 E. St. Joseph St., Lansing
Parker, Earl E.....207 E. Bellevue, Leslie
Philips, David P.....1609 E. Kalamazoo St., Lansing
Pinkham, R. A.....535 N. Capital Ave., Lansing
Place, Edwin H.....Oldsmobile Division, Lansing
Plesscher, William....119 E. Grand River Ave., E. Lansing
Pomeroy, Richard W.....609 N. Washington, Lansing
Ponton, Joseph C.....307 S. Rogers, Mason
Poppen, C. J.....1057 Roxburgh Rd., East Lansing
Prall, H. J.....505 Bauch Bldg., Lansing
Randall, O. M.....802 Am. State Bank Bldg., Lansing
Rector, F. L.....823 Case St., Evanston, Ill.
Reynolds, E. E. (M).....
153 E. Grand River Ave., Williamston
Richards, F. D.....DeWitt
Richardson, M. L.....Sparrow Hospital, Lansing
Robson, Edmund J.....215 N. Walnut, Lansing
Rozan, J. S.....511 Bank of Lansing Bldg., Lansing
Ruhmkorff, R. H.....
Mich. State College Health Center, East Lansing
Russell, Claude V. (R).....Northport
Rutledge, S. H.....110 W. Hillsdale St., Lansing
Sander, J. F.....Cherry Hill Farm, Okemos
Scheidt, R. Rudolph....126 W. Grand River Ave., Lansing
Schoff, Charles A.....129 E. Grand River, Williamston
Schultz, Arthur E.....119 E. Grand River Ave., E. Lansing
Seger, F. L. (L).....
1035 Cherry St. N.E., St. Petersburg, Fla.
Shapiro, Hyman D.....125 W. Saginaw, Lansing
Sharp, Mahlon S.....606 W. Shiawassee St., Lansing
Shaw, Milton.....320 Townsend, Lansing
Sherman, G. A.....112 W. Hillsdale, Lansing
Sichler, Harper G.....301 Seymour, Lansing
Silverman, Irving E.....1009 E. Michigan, Lansing
Sleight, Justin L.....117½ W. Shiawassee, Lansing
Smith, Anthony V.....116 W. Sycamore St., Mason
Snyder, LeMoyne.....705 American State Bank, Lansing
Snyder, Ruth C. E.....234 W. Michigan, East Lansing
Spagnuolo, A. J.....1418 S. Logan St., Lansing
Spencer, Perry C.....320 Townsend, Lansing
Stanka, A. G.....Alexander Bldg., Grand Ledge
Stanley, Arthur L.....401 W. Greenlawn, Lansing
Steiner, A. A. (A).....411 Nob Hill Place, Ann Arbor
Steiner, S. D.....Oldsmobile Div., GMC, Lansing
Stiles, Frank.....2012 Olds Tower, Lansing
Stilwell, George D.....624 N. Capitol Ave., Lansing
Stimson, P. R.....401 W. Greenlawn, Lansing
Stow, Robert M.....512 Olds Tower Bldg., Lansing
Strauss, P. C.....408 Am. State Bank Bldg., Lansing
Stringer, C. J.....Ingham County Sanatorium, Lansing
Summers, John E.....401 Greenlawn, Lansing
Sundell, Edwin C.....112 W. Hillsdale St., Lansing
Swartz, F. C.....215 N. Walnut St., Lansing
Tamblyn, F. W.....335 Seymour, Lansing
Toothaker, K. W.....930 N. Washington Ave., Lansing
Trescott, Robert F.....716 Olds Tower, Lansing
Trimby, Robert H.....122 W. Hillsdale, Lansing
Troost, F. L.....4341 W. Delhi Road, Holt
Vander Slice, E. R. (L)....20 Terr. Walk, Berkeley, Cal.
VanderZalm, T. P.....701 S. Capital Ave., Lansing
Venier, Joseph H.....137 N. Larch St., Lansing
Wadley, Ralph.....335 Seymour, Lansing
Walker, Leo W.....St. Lawrence Hosp., Lansing
Webb, Roy O.....2176 Hamilton Rd., Box 3, Okemos
Wellman, John M.....301 Seymour Ave., Lansing
Wilensky, Thomas.....301 Seymour, Lansing
Wiley, Harold W.....402 N. Jenison St., Lansing
Willson, Howard S.....704 Olds Tower, Lansing
Wilson, Harry A.....703 S. Capitol, Lansing
Wolcott, Lester E.....Grand River & Grandview, Okemos
Worthington, Ralph.....303 Tussing Bldg., Lansing

IONIA-MONTCALM COUNTIES

Anderson, Donald H.....Portland
Bird, Wm. L.....Greenville
Bracey, L. E. (L).....Sheridan
Bunce, E. P.....Trufant
Bunce, Leo W.....Trufant
Campbell, R. E.....106 N. Depot St., Ionia
Dunkin, Lloyd S.....Greenville
Fleming, J. W. C.....Pewamo
Foust, Joseph C.....Ionia
Fox, Harold M.....Portland
Geib, O. P.....Carson City
Glerum, John B.....Greenville
Haarer, John G.....State Hospital, Ionia
Hansen, Carl M.....Stanton
Hansen, M. M.....Greenville
Haskell, R. H.....Wayne Co. Trg. School, Northville
Hoffs, M. A.....Lake Odessa
Hollard, A. E.....Belding
House, Glenn W.....602 W. Orange, Greenville
Kelsey, L. E.....Lakeview
Kopchick, Joseph .....Muir
Lilly, Isaac S.....Stanton
Lincoln, Norman.....Lake Odessa
Marston, L. L.....Lakeview
Messenger, A. L.....Portland
Minick, Wm.....Belding
Olsen, Bruce.....Greenville
Pates, Donald.....Belding
Peabody, C. H. (L).....582 Tod Lane, Youngstown, O.
Reid, Harold E.....Stanton
Rice, Robert E.....Greenville
Robertson, P. C.....Ionia State Hospital, Ionia
Seidel, K. E.....Ionia
Slagh, Milton E.....Saranac
Snider, J. D.....Ionia
Socha, Edmund S.....Ionia
Swift, E. R. (L).....Lakeview
Tannheimer, J. F.....Ionia
Trinca, Peter J.....Ionia
Van Loo, J. A.....422 S. Pleasant, Belding

JACKSON COUNTY

Abraham, A. O.....Hudson
Adams, Ellis W.....517 Wildwood, Jackson
Ahronheim, J. H.....1410 Greenwood, Jackson
Anderson, W. B.....404 Carter Bldg., Jackson
Appel, Saul.....510 Dwight Bldg., Jackson
Baker, George M.....Parma
Bartholic, Frank W.....Homer
Beckwith, Sidney A.....Stockbridge
Brashares, Z. A.....Brooklyn
Bullen, G. Rex.....418 Third, Jackson
Clarke, Corwin S.....605 Dwight Bldg., Jackson
Cochrane, Wayne A. (L).....409 McBride St., Jackson
Cooley, Charles W.....Mercy Hospital, Jackson
Cooley, Randall M.....141 East Robinson, Jackson
Corley, Cecil.....204 Homecrest Rd., Jackson
Corley, Ennis H.....1211 W. Franklin St., Jackson
Corley, Robert W.....204 Homecrest Rd., Jackson
Cox, Ferdinand (L).....434 Wildwood Ave., Jackson
Culver, Guy D. L.....Stockbridge
DeMay, Cuthbert E.....403 E. Michigan, Jackson
DeMay, John D.....403 E. Michigan, Jackson
Deming, Richard C.....517 Wildwood, Jackson
Dengler, Charles R.....504 Third Street, Jackson
Dickman, Harry M.....120 N. Michigan, Hudson

Douglas, E. W.....4000 Cooper St., Jackson
Enders, W. H. (L).....1102 National Bank Bldg., Jackson
Filip, H. K.....755 W. Michigan Ave., Jackson
Finton, Robert E.....290 W. Michigan, Jackson
Finton, Walter L.....290 W. Michigan Ave., Jackson
Gibson, Frank J. (L).....
2717 S. 6th, St. Petersburg, Fla.
Greenbaum, Harry.....1203 Greenwood, Jackson
Growt, Bowers H.....Addison
Habenicht, Hilda A.....910 Reynolds Bldg., Jackson
Hackett, Thomas E.....401 Carter Bldg., Jackson
Hackett, Thomas L.....401 Carter Bldg., Jackson
Hanft, Cyril F.....Springport
Hanna, Roger J.....T.B. Sanatorium, Richmond, Ind.
Hardie, George C.....290 W. Michigan, Jackson
Harris, Lester J. (E)....607 W. Washington Ave., Jackson
Hicks, Glenn C. (L).....615 Dwight Bldg., Jackson
Holst, John B.....1023 Francis St., Jackson
Holstein, Arthur P.....214 Ann Arbor St., Manchester
Hunt, Maurice E.....2534 Francis St., Jackson
Huntley, W. B.....c/o S.S. Del Mar Delta Lines, Inc.,
New Orleans 9, Louisiana
Joerin, W. A.....612 First Street, Jackson
Karr, J. P.....290 W. Michigan, Jackson
Keefer, A. H.....Concord
Kempton, George B.....290 W. Michigan Ave., Jackson
Kline, S. L.....3525 Jefferson Road, Clark Lake
Kudner, D. F.....435 Wildwood, Jackson
Lake, Edward C.....612 First Street, Jackson
Landron, Daniel.....Michigan Center
Leahy, Edward O.....1205 National Bank Bldg., Jackson
Lenz, Charles R., Jr.....405 First Street, Jackson
Leonard, Clyde A. (L).....
1401 Jackson City Bank Bldg., Jackson
Lewis, E. F.....901 Reynolds Bldg., Jackson
Linden, V. E.....605 Dwight Bldg., Jackson
Ludwick, J. E.....237 W. Washington, Jackson
Ludwick, J. P.....Hdqts. Med. Det. 40th Inf. Div.,
APO No. 6, c/o P.M., San Francisco, Calif.
McGarvey, William E.....802 City Bank Bldg., Jackson
McLaughlin, M. J.....502 W. Michigan, Jackson
McLaughlin, John M.....502 W. Michigan, Jackson
McLauthlin, Herbert B.....439 Wildwood Ave., Jackson
Meads, Jason B.....1406 City Bank Bldg., Jackson
Medlar, Robert E.....505 Dwight Bldg., Jackson
Miller, Jack L.....519 North East Ave., Jackson
Munro, Colin D. (E).....740 W. Michigan Ave., Jackson
Munro, Nathan D.....740 W. Michigan Ave., Jackson
Murphy, Bernard M.....1010 E. Michigan Ave., Jackson
Newton, Ray E.....910 Reynolds Bldg., Jackson
Oleksy, Stanley P.....744 W. Michigan Ave., Jackson
O'Meara, James J.....1126 Burr, Jackson
Otis, Grant L.....525 Wildwood Ave., Jackson
Payne, Andrew K.....Foote Hospital, Jackson
Porter, Horace W.....505 Wildwood Ave., Jackson
Pray, Frank F.....310 Steward Ave., Jackson
Pray, G. R. (E).....404 S. Jackson, Jackson
Rice, J. W.....603 Jackson City Bank Bldg., Jackson
Ries, Richard G.....290 W. Michigan Ave., Jackson
Riley, Philip A.....500 S. Jackson St., Jackson
Sargent, Leland E.....114 N. Thompson St., Jackson
Sautter, W. A.....Horton
Schmidt, T. E.....1202 Reynolds Bldg., Jackson
Scott, John A.....432 W. Michigan Ave., Jackson
Shaeffer, Arthur M.....290 W. Michigan Ave., Jackson
Shaeffer, L. Dale.....290 W. Michigan Ave., Jackson
Sher, David B.....4000 Cooper St., Jackson
Sill, Henry W.....290 W. Michigan, Jackson
Sirhal, Alfred M.....Brooklyn
Smith, Dean W.....500 W. Michigan, Jackson
Southwick, W. A. (A).....362 E. Main St., Springport
Stewart, L. L. (E).....308 Edgewood, Jackson
Stewart, L. L., Jr.....290 W. Michigan Ave., Jackson
Stolberg, Carl A.....517 Wildwood Ave., Jackson
Stone, Ethon L.....143 N. Jackson, Jackson
Sugar, Samuel.....509 Reynolds Bldg., Jackson
Tate, Cecil E.....1315 Francis St., Jackson
Taylor, Ross V.....517 Wildwood, Jackson
Thayer, E. A.....1104 National Bank Bldg., Jackson
Thalner, L. F.....609 West Michigan Ave., Jackson
Thompson, Tom B.....424 W. Michigan, Jackson
Torwick, E. T.....501 Dwight Bldg., Jackson
Townsend, J. W...108 Hague, Vandercook Lake, Jackson
Van Schoick, Frank .....419 W. High St., Jackson
Van Schoick, John D.....Hanover
Van Wagnen, Frederick I., Jr.....
434 Wildwood Ave., Jackson
Vivirski, Edward E.....603 South Elm St., Jackson
Wallace, Warren S.....816 Second St., Jackson
Way, Kenneth E.....315 N. Madison St., Marshall
Weddon, Edward R.....Stockbridge
Wholihan, John W.....102 Lydia Street, Jackson
Wickham, Woodward A.....420 W. Michigan, Jackson
Wilson, Norman D. (L).....1107 Reynolds Bldg., Jackson
Winter, G. E. (E).....420 Rogers Bldg., Jackson

KALAMAZOO COUNTY

Aach, Hugo A.....1318 Am. Nat. Bank Bldg., Kalamazoo
Alexander, C. A.....118 W. North, Kalamazoo
Andrews, Sherman E.....224 E. Cedar St., Kalamazoo
Appel, B. A.....310 Bronson Med. Center, Kalamazoo
Appel, William P...310 Bronson Med. Center, Kalamazoo
Armstrong, Robert J.....605 Hanselman Bldg., Kalamazoo
Banner, Lawrence R.....507 S. Burdick St., Kalamazoo
Barak, Herbert G.....224 McNair Bldg., Kalamazoo
Barnabee, James W. (E).....503 S. Burdick, Kalamazoo
Barrows, Winona M.....Pinecrest San., Oshtemo
Barry, M. Leroy.....Plainwell Sanitarium, Plainwell
Benjamin, Margaret H.....2217 Parchmount, Kalamazoo
Bennett, Keith F.....252 E. Lovell, Kalamazoo
Betz, E. G.....216 Bronson Med. Center, Kalamazoo
Birch, W. G.....212 Bronson Med. Center, Kalamazoo
Bodmer, Harvey C.....403 W. Kalamazoo St., Kalamazoo
Borgman, Wallace.....723 W. South St., Kalamazoo
Breneman, James C.....25 Pearl St., Galesburg
Brown, Irmel W.....306 Kalamazoo Nat. Bank, Kalamazoo
Burbidge, Earl L.....
Upjohn Co., 301 Henrietta St., Kalamazoo
Burrell, R. B.....907 Am. Nat. Bank Bldg., Kalamazoo
Callander, C. Glenn (M).....
1650 S. Alvaredo St., Oceanside, Calif.
Chapman, Paul B.....Vicksburg
Chrest, Clarence P.....458 W. South St., Kalamazoo
Cobb, Horace R.....305 Pythian Bldg., Kalamazoo
Conrad, Maynard M.....252 E. Lovell St., Kalamazoo
Cook, R. G.....222 McNair Bldg., Kalamazoo
Cooper, Paul F.....252 E. Lovell St., Kalamazoo
Crane, Warren B.....420 S. Rose St., Kalamazoo
Crawford, Kenneth L.....612 Douglas Ave., Kalamazoo
Creager, Ray O.....909 Wheaton, Kalamazoo
Cretsinger, Francis C.....224 E. Cedar St., Kalamazoo
Currier, R. K.....6646 Portage St., Kalamazoo
Dahlstrom, Doris E.....723 S. Westnedge Ave., Kalamazoo
Dana, Robert L.....228 W. Cedar St., Kalamazoo
DeGroat, Albert F.....458 W. South St., Kalamazoo
Delbert, Stewart G.....530 W. Lovell St., Kalamazoo
DeLong, Robert E.....Borgess Hospital, Kalamazoo
DePree, Harold E...216 Bronson Med. Center, Kalamazoo
Dew, Robert R.....252 E. Lovell, Kalamazoo
DeWitt, Norman L.....802 Hanselman Bldg., Kalamazoo
Dick, Leo A.....611 Howard St., Kalamazoo
Doezema, E. R. (M).....
316 Bronson Medical Center, Kalamazoo
Dowd, B. J.....420 John St., Kalamazoo
Doyle, Frederick M.....611 Howard St., Kalamazoo
Estill, Don V.....414 W. Patterson St., Kalamazoo
Fast, R. B.....1410 Am. Nat. Bank Bldg., Kalamazoo
Fath, August F.....907 Am. Nat. Bank Bldg., Kalamazoo
Finton, Max A.....252 E. Lovell, Kalamazoo
Fopeano, John V.....815 Am. Nat. Bank Bldg., Kalamazoo
French, Merle R.....1128 Miles Ave., Kalamazoo

Fulkerson, C. B. (L)
402 Kalamazoo Nat. Bank Bldg., Kalamazoo
Fuller, Paul M.....419 S. Burdick St., Kalamazoo
Gerstner, Louis W.....420 John St., Kalamazoo
Goodhue, Lolita G.....2503 W. Main St., Kalamazoo
Grant, Frederick E. (E).....214 Douglas Ave., Kalamazoo
Green, William L...810 Am. Nat. Bank Bldg., Kalamazoo
Grekin, R. H. (M)
1310 Am. Nat. Bank Bldg., Kalamazoo
Hammer, J. M.....100 Maple St., Parchment
Hanson, Curtis M...217 Bronson Med. Center, Kalamazoo
Harrelson, William D...136 E. Michigan Ave., Kalamazoo
Hayner, Russell A.....1043 E. Cork St., Kalamazoo
Heersma, H. S.....252 E. Lovell, Kalamazoo
Heinle, Robert.....The Upjohn Co., Kalamazoo
Herbert, Walter N.....422 John Street, Kalamazoo
Hildreth, Ross C.....458 W. South St., Kalamazoo
Hodgman, Albert B.....612 Douglas Ave., Kalamazoo
Hoebeke, W. G.....212 Bronson Med. Center, Kalamazoo
Holder, Charles O.....Kalamazoo State Hosp., Kalamazoo
Howard, R. Grant....Borgess Hosp., Suite 583, Kalamazoo
Howard, Willard H.....1602 Gull Road, Kalamazoo
Hubbell, R. J.....252 E. Lovell St., Kalamazoo
Huyser, William C.....427 S. Burdick St., Kalamazoo
Irwin, William D.....805 Hanselman Bldg., Kalamazoo
Jackson, Howard C.
252 E. Lovell St., Rm. 220, Kalamazoo
Jennings, R. M.....Box A, Kalamazoo
Jennings, Wesley O.....420 John St., Kalamazoo
Kavanaugh, Wm. R.....612 Douglas Ave., Kalamazoo
Kilgore, Robert N.....252 E. Lovell St., Kalamazoo
Klerk, William J.....224 E. Cedar St., Kalamazoo
Koestner, Paul A.....1303 Portage, Kalamazoo
Lawrence, J. O.....301 Henrietta St., Kalamazoo
Lavender, Howard C.....252 E. Lovell St., Kalamazoo
Light, Richard U.....828 W. South St., Kalamazoo
Light, S. Rudolph....503 Am. Nat. Bank Bldg., Kalamazoo
Littig, John D.....815 Am. Nat. Bank Bldg., Kalamazoo
Locklin, W. Kaye..1410 Am. Nat. Bank Bldg., Kalamazoo
Loynd, J. W.....901 Am. Nat. Bank Bldg., Kalamazoo
MacDonald, Marshall A.
319 Bronson Medical Center, Kalamazoo
MacGregor, J. R.....100 Maple St., Parchment
Machin, Harold A.....420 John St., Kalamazoo
Malone, James G.....420 John St., Kalamazoo
Margolis, Frederick J.....2901 S. Westnedge, Kalamazoo
Marshall, Don.....252 E. Lovell St., Kalamazoo
Marshall, William P.....160 Edgemoor Ave., Kalamazoo
Martens, Irvin J.....252 E. Lovell St., Kalamazoo
May, Donald G.....420 John St., Kalamazoo
McCarthy, Joseph S.....1005 Oakland Drive, Kalamazoo
Moe, Carl R.....316 Henrietta St., Kalamazoo
Morter, Roy A.
Kalamazoo State Hospital, Box A, Kalamazoo
Nell, Edward R.....207 McNair Bldg., Kalamazoo
Nibbelink, Benjamin.....903 Hanselman Bldg., Kalamazoo
Overbey, Charles B.....State Hospital, Kalamazoo
Patmos, Martin.....306 Bronson Med. Center, Kalamazoo
Pearson, Edwin O.....458 W. South St., Kalamazoo
Peelen, J. William.....316 Henrietta St., Kalamazoo
Peelen, Matthew....320 Bronson Med. Center, Kalamazoo
Perry, Clifton W...1307 Am. Nat. Bank Bldg., Kalamazoo
Prentice, Hazel R.....458 W. South St., Kalamazoo
Pullon, Alton E.....422 John St., Kalamazoo
Rasmussen, Leo B.....152 N. Main, Vicksburg
Reames, Harold R.....The Upjohn Co., Kalamazoo
Rigterink, Gerald H.....2424 S. Park Ave., Kalamazoo
Roberts, Millard S...303 Am. Nat. Bank Bldg., Kalamazoo
Rockwell, Donald C.
1418 American Nat. Bank Bldg., Kalamazoo
Rogers, R. J. (A).....108 Mill St., Vicksburg
Ryan, Frederick C.....507 S. Burdick, Kalamazoo
Sage, Edward D. (E).....127 S. Burdick, Kalamazoo
Scherer, Flora.....Kalamazoo State Hosp., Kalamazoo
Scholten, D. J.....522 S. Burdick, Kalamazoo
Scholten, Roger A.....252 E. Lovell St., Kalamazoo
Scholten, William (R).....
Kalamazoo State Hospital, Kalamazoo
Schrier, C. M.....Kalamazoo State Hosp., Kalamazoo
Schrier, Paul G.....317 Bronson Med. Center, Kalamazoo
Schrier, Thomas.....1008 Dwillard Drive, Kalamazoo
Scott, William A...208 Bronson Med. Center, Kalamazoo
Shackleton, William E. (R)....420 S. Rose St., Kalamazoo
Shook, Ralph W.....611 Am. Nat. Bank Bldg., Kalamazoo
Siemsen, W. J.....252 Lovell, Rm. 316, Kalamazoo
Simpson, Bernard W.....610 S. Burdick St., Kalamazoo
Sisk, Wilfred N.....
Upjohn Company, 301 Henrietta St., Kalamazoo
Slatmyer, Karel R.....605 Hanselman Bldg., Kalamazoo
Smith, T. C.....Kalamazoo State Hosp., Kalamazoo
Sofen, Morris B.....
603 Kalamazoo Nat. Bank Bldg., Kalamazoo
Southworth, Maynard N.....Box 36, Schoolcraft
Stewart, William C., Jr. (A).....
224 E. Cedar St., Kalamazoo
Stiller, Anthony F.....Pinecrest Sanatorium, Kalamazoo
Stryker, Homer H.....Borgess Hospital, Kalamazoo
Upjohn, E. G.....
Upjohn Company, 301 Henrietta St., Kalamazoo
VanderVelde, Kenneth M.....
320 Bronson Medical Center, Kalamazoo
Verhage, Martin D.....228 W. Cedar, Kalamazoo
Volderauer, John C.....458 W. South St., Kalamazoo
Warnke, Robert D.....
1304 American Nat. Bank Bldg., Kalamazoo
Weadon, Preston S.....252 E. Lovell St., Kalamazoo
Wilbur, E. P. (E).....1730 Cambridge, Kalamazoo
Williamson, Edwin M.....
315 Bronson Medical Center, Kalamazoo
Youngs, A. S. (E).....416 S. Burdick, Kalamazoo
Youngs, Cyril A.....416 S. Burdick, Kalamazoo
Zolen, Margaret H.....628 S. Park, Kalamazoo

KENT COUNTY

Adams, Frank A.....526 Leonard St. N.W., Grand Rapids
Aitken, George T.....Kendell Prof. Bldg., Grand Rapids
Albers, G. Donald.....203 Paris Ave. S.E., Grand Rapids
Alfenito, Felix S.....308 Med. Arts Bldg., Grand Rapids
Allen, R. V.....1669 Plainfield N.E., Grand Rapids
Anderson, Karl A.....Michigan Veterans Facility,
3000 Monroe N.E., Grand Rapids
Andre, Harvey M.....201 Med. Arts Bldg., Grand Rapids
Avery, Noyes L.....309 Kendall Prof. Bldg., Grand Rapids
Baert, George H. (E)....218 Kendall Bldg., Grand Rapids
Baker, Abel J. (L).....Ashton Bldg., Grand Rapids
Ballard, Milner S.....
1516 Grand Rapids Nat. Bank Bldg., Grand Rapids
Balyeat, Gordon W.....Blodgett Med. Bldg., Grand Rapids
Barofsky, G. F.....736 Burton St. S.E., Grand Rapids
Beaton, James H.....1516 Wealthy St. S.E., Grand Rapids
Beeman, Carl B.....509 Kendall Prof. Bldg., Grand Rapids
Beets, W. Clarence.....Loraine Bldg., Grand Rapids
Bell, Charles M.....Kendell Prof. Bldg., Grand Rapids
Benjamin, Howard G.....
423 Medical Arts Bldg., Grand Rapids
Benson, Roland R.....St. Mary's Hosp., Grand Rapids
Bergsma, Stuart.....209 Kalamazoo S.E., Grand Rapids
Bettison, Wm. L.....301 Loraine Bldg., Grand Rapids
Beukema, Marenus J.....
6850 S. Division Ave., Grand Rapids
Bignall, C. Rexford (M)..2637 Belfast S.E., Grand Rapids
Billings, Elton P. (L).....300 Gilbert Bldg., Grand Rapids
Blackburn, Henry M.....Metz Bldg., Graand Rapids
Boelkins, Richard C.....125 Fountain N.E., Grand Rapids
Boersma, Donald.....528 Med. Arts Bldg., Grand Rapids
Boet, Frank A. (L).....849 Scribner N.W., Grand Rapids
Boet, John T.....2339 Wyoming S.W., Grand Rapids
Bolt, Robert J. (A).....University Hospital, Ann Arbor
Bond, George L. (L).....Rapid City
Booher, Craig E.....Blodgett Med. Bldg., Grand Rapids

Bosch, Leon C.....512 Med. Arts Bldg., Grand Rapids
Botting, A. J.....Byron Center
Boyce, D. C.....606 Loraine Bldg., Grand Rapids
Brace, F. C.....1498 Lake Drive S.E., Grand Rapids
Brayman, Charles W. (L).....Cedar Springs
Brink, J. Russell.....308 Metz Bldg., Grand Rapids
Brook, Jacob D. (L).....Grandville
Brotherhood, James S. (L).....
1749 Breton Road S.E., Grand Rapids
Browning, Eugene S.....
303 Keith Theater Bldg., Grand Rapids
Buist, S. J.....55 Sheldon S.E., Grand Rapids
Bull, Frank L.....72 E. Division, Sparta
Burleson, John S.....531 Greenwood S.E., Grand Rapids
Burling, Wesley M.....
758 Michigan St. N.E., Grand Rapids
Burroughs, Frank M., Jr.....11 Wilson, Grandville
Butler, Wm. J.....324 Med. Arts Bldg., Grand Rapids
Byers, Earle J.....410 Med. Arts Bldg., Grand Rapids
Byrd, Mary Lou....700 Kent Hills Dr. N.E., Grand Rapids
Campbell, Alexander M. (E).....
Oakwood Manor, 345 Cherry St. S.E., Grand Rapids
Carpenter, Luther C.....604 Metz Building, Grand Rapids
Cayce, William.....
1420 Grand Rapids Nat. Bank Bldg., Grand Rapids
Chamberlain, Louis H. (L).....
441 Crescent N.E., Grand Rapids
Chandler, Donald.....719 Ashton Bldg., Grand Rapids
Clawson, Carroll K. (M).....
445 Cherry St. S.E., Grand Rapids
Claytor, Robert W.....142 Michigan N.W., Grand Rapids
Clement, Duane M.....72 Sheldon S.E., Grand Rapids
Corbus, Burton R. (L).....Metz Bldg., Grand Rapids
Crane, Harold D...204 Medical Arts Bldg., Grand Rapids
Currier, F. P.....955 Floral Drive S.E., Grand Rapids

Dales, Ernest W.....
1424 Grand Rapids Nat. Bank Bldg., Grand Rapids
Damstra, Harold J.....1553 Boston S.E., Grand Rapids
Davis, David B.....403 Med. Arts Bldg., Grand Rapids
Dawson, W. Douglas..408 Med. Arts Bldg., Grand Rapids
Dean, Alfred.....Sagola
DeBoer, Clarence J.....11 S. Wilson, Grandville
DeBoer, Guy W.....220 Med. Arts Bldg., Grand Rapids
DeMaagd, Gerald.....143 Courtland, Rockford
DeMol, Richard J.....1414 Eastern S.E., Grand Rapids
Denham, R. H.....Metz Bldg., Grand Rapids
DePree, Isla G.....Kendall Bldg., Grand Rapids
DePree, Joseph.....Blodgett Med. Bldg., Grand Rapids
DeVel, Leon.....739 Plymouth S.E., Grand Rapids
DeVries, Daniel.....1414 Eastern S.E., Grand Rapids
Dewey, Kent A.....607 Med. Arts Bldg., Grand Rapids
DeYoung, Thies.....35 E. Division, Sparta
Dick, Mark W.....
1508 Grand Rapids Nat. Bank Bldg., Grand Rapids
Diskey, Donald G.....634 Bridge N.W., Grand Rapids
Docter, Luebert.....312 Med. Arts Bldg., Grand Rapids
Doran, F. L.....314 Metz Bldg., Grand Rapids
Droste, James C.....72 Sheldon S.E., Grand Rapids
Ducey, Edward F.....1725 E. Main St., Ventura, Calif.
Dyer, David P.....62 Ransom N.E., Grand Rapids

Eaton, Robert M.....12 Burton S.E., Grand Rapids
Eggleston, H. R.....117 Page N.E., Grand Rapids
Ellis, M. E.....2128 Hall St. S.E., Grand Rapids

Failing, John F.....502 Metz Bldg., Grand Rapids
Farber, Charles E.....68 Ransom N.E., Grand Rapids
Faust, Lawrence W...425 Med. Arts Bldg., Grand Rapids
Fellows, Kenneth E.....Metz Bldg., Grand Rapids
Ferguson, James A.....72 Sheldon S.E., Grand Rapids
Ferguson, Lynn A.....72 Sheldon S.E., Grand Rapids
Ferrand, Louis G.....3 N. Monroe, Rockford
Fitts, Ralph L.....Metz Bldg., Grand Rapids
Flynn, J. Donald.....240 Kendall Prof. Bldg.,
12-18 Monroe N.E., Grand Rapids
Fochtman, T. W.....72 E. Division, Sparta
Foshee, J. C.....602 Loraine Bldg., Grand Rapids
Frantz, Charles H.....Blodgett Med. Bldg., Grand Rapids
Fuller, E. H., Jr.....702 Ashton Bldg., Grand Rapids
Fuller, W. J.....421 Med. Arts Bldg., Grand Rapids

Gadzikowski, Isabelle T.....700 Fuller N.E., Grand Rapids
Gamm, Kenneth E...1516 Wealthy St. S.E., Grand Rapids
Gibbs, Floyd F.....4327 S. Division Ave., Grand Rapids
Gilbert, Ralph H.....509 Metz Bldg., Grand Rapids
Gillett, F. S.....1928 Sherman, Grand Rapids
Gorney, Mark (A).....2722 Hall St. S.E., Grand Rapids
Gosling, Robert J. (M).....Birch Hills, Sask., Canada
Grant, Lucile R.....Blodgett Med. Bldg., Grand Rapids
Grass, Edward J.....758 Cherry S.E., Grand Rapids
Gray, Fred B.....512 Med. Arts Bldg., Grand Rapids
Graybiel, George P.....Cherry Valley S.E., Caledonia
Griffith, Lucian S...505 Kendall Prof Bldg., Grand Rapids
Haeck, William, Jr.....1414 Eastern S.E., Grand Rapids
Hagerman, D. B.....203 Medical Arts Bldg., Grand Rapids
Hamp, Arthur K.....Kendall Prof. Bldg., Grand Rapids
Hardy, Faith F.....Cedar Springs
Hayes, L. W., Sr.....Howard City
Hayes, Lawrence W., Jr. (A).....
USAF Hosp., Scott Air Force Base, Illinois
Heetderks, Dewey R...405 Med. Arts Bldg., Grand Rapids
Henry, James (E).....38 Monroe St. N.W., Grand Rapids
Herrick, Ruth.....303 Med. Arts Bldg., Grand Rapids
Hill, Morgan A.....310 East Fulton St., Grand Rapids
Hill, Thomas B.....103 W. Main St., Lowell
Hodgen, John T.....Blodgett Med. Bldg., Grand Rapids
Hoekstra, Andrew L.....
68 Ransom Avenue N.E., Grand Rapids
Hoffs, Albertus J.....522 Med. Arts Bldg., Grand Rapids
Holcomb, J. Winslow.....
1315 Grand Rapids Nat. Bank Bldg., Grand Rapids
Holkeboer, Henry D.....
1925 Eastern Ave. S.E., Grand Rapids
Hollander, Stephen..1600 Grandville Ave., Grand Rapids
Hoogerhyde, Jack.....504 Loraine Bldg., Grand Rapids
Houghton, Richard C...525 Glenwood S.E., Grand Rapids
Hudson, H. C.....456 Cherry St. S.E., Grand Rapids
Hufford, A. R.....260 Jefferson S.E., Grand Rapids
Humphreys, James C...127 Fountain N.E., Grand Rapids
Hunderman, Edward D.....
538 Eastern Ave. S.E., Grand Rapids
Hyland, William A.....Metz Bldg., Grand Rapids
Ireland, H. D.....700 Fuller Ave. N.E., Grand Rapids
Jack, William W.....Blodgett Med. Bldg., Grand Rapids
Jameson, F. M.....300 Fulton St. E., Grand Rapids
Jaracz, Walter J.....634 Bridge St. N.W., Grand Rapids
Jarvis, Charles.....1520 Plainfield N.E., Grand Rapids
Jellema, John F.....Gen. Mot. Plant No. 2, Grand Rapids
Jensen, William B.....
100 Morningside Dr. S.E., Grand Rapids
Johns, Donald C.....403 Loraine Bldg., Grand Rapids
Johnston, William L.....Metz Bldg., Grand Rapids
Jones, H. E.....1614 N. Connecticut, Royal Oak
Jones, Horace C.....Blodgett Mem. Hosp., Grand Rapids

Kelly, Edward F.....507 Loraine Bldg., Grand Rapids
Kempter, Albert H.....1200 Lake Dr. S.E., Grand Rapids
Kendall, Eugene L.....360 Division St. S., Grand Rapids
Kinkella, Albert M.....Kendall Prof. Bldg., Grand Rapids
Klaus, C. D.....1498 Lake Drive S.E., Grand Rapids
Klein, Jacob E.....
Hotel Mertens, 35 Oak St. S.W., Grand Rapids
Kniskern, Paul W.....421 Med. Arts Bldg., Grand Rapids
Kooistra, Henry P.....412 Med. Arts Bldg., Grand Rapids
Kreulen, Henry J...2452 Godwin Ave. S.E., Grand Rapids
Kriekard, P. J. (L).....735 Leonard N.W., Grand Rapids
Kruse, William T., Jr.....312 E. Fulton, Grand Rapids

Laird, Robert G.....509 Metz Bldg., Grand Rapids
Lamberts, Austin E...68 Ransom Ave. N.E., Grand Rapids
Lanning, Nicholas E.....
1200 Madison St. S.E., Grand Rapids
Lentini, Joseph R.....518 Metz Bldg., Grand Rapids
Lewis, G. H.....3425 Division Ave. S., Grand Rapids
Lieffers, Harry.....400-2 Med. Arts Bldg., Grand Rapids
List, Carl F.....626 Med. Arts Bldg., Grand Rapids
Logie, James W.....321 Metz Bldg., Grand Rapids

MacDonell, James A...Kendall Prof. Bldg., Grand Rapids
MacIntyre, D. S.....300 E. Fulton, Grand Rapids
Marsh, John P.....509 Ashton Bldg., Grand Rapids
Martin, A. M.....225 Metz Bldg., Grand Rapids

Martinus, Martin .....
525 Overbrook Lane, S.E., Grand Rapids
Maynard, Mason S.....445 Cherry St. S.E., Grand Rapids
McCormick, John K.....
1371 Plainfield Ave. N.E., Grand Rapids
McDougal, Wm. J.....127 Fountain N.E., Grand Rapids
McDougall, Clarice L.....310 E. Fulton St., Grand Rapids
McKay, O. D.....207 W. Main, Lowell
McKenna, Joseph L.....
508 Medical Arts Bldg., Grand Rapids
McKinlay, Leland M.....604 Loraine Bldg., Grand Rapids
Meade, Richard H., Jr.....
Blodgett Medical Bldg., Grand Rapids
Meeuwsen, Bernard....612 Med. Arts Bldg., Grand Rapids
Mehney, Gayle H.....Med. Arts Bldg., Grand Rapids
Miller, J. Duane.....6th Floor, Metz Bldg., Grand Rapids
Miller, John J.....1580 Water, Marne
Mitchell, W. B.....507 Med. Arts Bldg., Grand Rapids
Moen, Cornetta G.....53 Lafayette S.E., Grand Rapids
Moleski, Joseph V.....628 Med. Arts Bldg., Grand Rapids
Moleski, Leo T.....528 Med. Arts Bldg., Grand Rapids
Moleski, S. L.....528 Med. Arts Bldg., Grand Rapids
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Morey, Edward C. (L)..557 Fulton St. E., Grand Rapids
Mouw, Dirk R.....1854 Division S., Grand Rapids
Mulder, G. Arthur.....68 Ransom N.E., Grand Rapids
Mulder, J. D.....6850 Division Ave. S., Grand Rapids
Nanzig, Reinard P.....1516 Wealthy S.E., Grand Rapids
Noordewier, Albert (L).....
1518 Grand Rapids Nat. Bank Bldg., Grand Rapids
Northouse, Peter B...418 Med. Arts Bldg., Grand Rapids
Notier, Victor A.....606 Med. Arts Bldg., Grand Rapids
Oates, Samuel M., Capt. (MC) (A).....
219 Chilton Ave., Nashville, Tenn.
Oliver, Walter W.....318 Med. Arts Bldg., Grand Rapids
Overbeek, Ernest L.....445 Cherry St. S.E., Grand Rapids
Paalman, Russell J.....222 Med. Arts Bldg., Grand Rapids
Patterson, P. W.....1961 Divison Ave. S., Grand Rapids
Payne, C. Allen.....Blodgett Mem. Hosp., Grand Rapids
Pearson, Glenn A.....312 Med. Arts Bldg., Grand Rapids
Pedden, John R., Jr...445 Cherry St., S.E., Grand Rapids
Plekker, J. D.....6850 Division S., Grand Rapids
Pool, John D.....445 Cherry St. S.E., Grand Rapids
Posthuma, A. E.....307 Med. Arts Bldg., Grand Rapids
Postma, E. Y.....68 Ransom N.E., Grand Rapids
Pott, A. L.....1011 E. Fulton, Grand Rapids
Prothro, Winston B.....Health Dept., City Hall Annex,
303 Ionia Ave. N.W., Grand Rapids
Ragsdale, L. V.....Butterworth Hospital, Grand Rapids
Ralph, L. Paul.....402 Metz Bldg., Grand Rapids
Rasmussen, R. A.....Blodgett Med. Bldg., Grand Rapids
Reed, Torrance.....304 Ashton Bldg., Grand Rapids
Reus, William F.....24 Burton S.E., Grand Rapids
Riekse, J. M.....1916 Divison S., Grand Rapids
Rigterink, John W. (E).....Metz Bldg., Grand Rapids
Riley, G. L.....1419 Coit N.E., Grand Rapids
Ringenberg, J. C.....420 Med. Arts Bldg., Grand Rapids
Robb, Charles S.....445 Cherry St. S.E., Grand Rapids
Robbert, J. C.....11 S. Wilson, Grandville
Roberts, Mortimer E. (E).....
625 Plymouth S.E., East Grand Rapids
Robinson, Harold C...509 Med. Arts Bldg., Grand Rapids
Rodgers, William L.....616 Bridge N.W., Grand Rapids
Rosenzweig, Leonard .....
1516 Wealthy St. S.E., Grand Rapids
Roth, Emil M.....55 Sheldon S.E., Grand Rapids
Ryan, John A.....324 Med. Arts Bldg., Grand Rapids
Sanders, J. F.....226 Med. Arts Bldg., Grand Rapids
Schaubel, Howard J.....404 Loraine Bldg., Grand Rapids
Schermerhorn, L. J.....
1508 Grand Rapids Nat. Bank Bldg., Grand Rapids
Schneider, G. R.....Blodgett Med. Bldg., Grand Rapids
Schnoor, E. W.....216 Med. Arts Bldg., Grand Rapids
Schnute, Louise F.....
1508 Grand Rapids Nat. Bank Bldg., Grand Rapids
Scott, William B.....114½ Michigan N.W., Grand Rapids
Sculley, Raymond E.....126 Burton S.E., Grand Rapids
Sevensma, Elisha S.....
2114 Anderson Dr. S.E., Grand Rapids
Sevensma, Eugene S. (L).....
1317 Grand Rapids Nat. Bank Bldg., Grand Rapids
Shellman, Millard W.....Metz Building, Grand Rapids
Shepard, B. H.....103 W. Main St., Lowell
Sidell, Richard H.....312 E. Fulton, Grand Rapids
Siebers, Bernard H.....26 Sheldon S.E., Grand Rapids
Sluyter, J. S.....1034 Franklin S.E., Grand Rapids
Smith, A. B.....Metz Bldg., Grand Rapids
Smith, Edwin M...201 Kendall Prof. Bldg., Grand Rapids
Smith, Ferris.....Blodgett Med. Bldg., Grand Rapids
Smith, R. Earle.....709 Ashton Bldg., Grand Rapids
Smith, Robert B.....125 Fountain N.E., Grand Rapids
Smith, Robert O. (M).....16937 Log Cabin, Detroit
Snyder, Clarence H...200 Med. Arts Bldg., Grand Rapids
Southwick, G. H.....55 Sheldon Ave. S.E., Grand Rapids
Steffensen, Wallace H.....
Blodgett Medical Bldg., Grand Rapids
Stonehouse, G. G.....408 Med. Arts Bldg., Grand Rapids
Stoneman, Fernley.....11 South Wilson, Grandville
Stover, Virgil E.....1719 Madison S.E., Grand Rapids
Stuart, Gerhardus J. (L).....Metz Bldg., Grand Rapids
Sugg, Cullen E.....303 E. Fulton, Grand Rapids
Sugiyama, Titsuo.....Loraine Bldg., Grand Rapids
Swenson, H. C.....303 Loraine Bldg., Grand Rapids
Ten Have, John.....806 Leonard N.W., Grand Rapids
Tesseine, Arthur J.....
242 Jefferson Ave. S.E., Grand Rapids
Teusink, J. H.....Cedar Springs
Thompson, Athol B...Blodgett Med. Bldg., Grand Rapids
Thompson, Ed. C.....522 Med. Arts Bldg., Grand Rapids
Thompson, Frank D...Blodgett Med. Bldg., Grand Rapids
Thomson, J. W.....1516 Wealthy St. S.E., Grand Rapids
Tidey, Marcus B.....456 Cherry S.E., Grand Rapids
Tiffany, Joseph C.....401 Metz Bldg., Grand Rapids
Torgerson, Wm. R.....321 Metz Bldg., Grand Rapids
Truog, Clarence P.....201 Metz Bldg., Grand Rapids
Usndek, Harold E.....220 Med. Arts Bldg., Grand Rapids
Uthoff, Carl W.....68 Ransom Ave. N.E., Grand Rapids
VanBelois, Harvard J.....
522 Medical Arts Bldg., Grand Rapids
VanBree, R. S.....204 Loraine Bldg., Grand Rapids
VandenBerg, Allison R.....
524 Medical Arts Bldg., Grand Rapids
VandenBerg, Henry J. (L).....
2933 Bonnell Rd. S.E., Grand Rapids
VanderMeer, Raymond .....
407 Medical Arts Bldg., Grand Rapids
VanderPloeg, William H.....
1209 Kalamazoo S.E., Grand Rapids
VanDuine, Henry J...206 Med. Arts Bldg., Grand Rapids
Van't Hof, Albert.....Metz Bldg., Grand Rapids
VanNoord, Gelmer A. (A).....
6850 Division S., Grand Rapids
Van Portfliet, Paul (A).....
505 Medical Arts Bldg., Grand Rapids
Van Solkema, Andrew A.....953 E. Fulton, Grand Rapids
Van Solkema, Arthur.....64 State W., Grandville
VanWoerkom, Daniel.....750 W. Leonard, Grand Rapids
Van Zwalenburg, Benjamin R.....
Metz Bldg., Grand Rapids
Veldman, Harold E...222 Med. Arts Bldg., Grand Rapids
Venema, Jay R.....612 Med. Arts Bldg., Grand Rapids
Ver Meulen, John.....2400 Wyoming S.W., Grand Rapids
Ver Meulen, Peter.....105 Baynton N.E., Grand Rapids
Verwys, A. L. Hubert.....815 Alger S.E., Grand Rapids
Vining, Keats K., Jr...305 Med. Arts Bldg., Grand Rapids
Vis, William R.....504 Med. Arts Bldg., Grand Rapids
Vyn, Jay D.....615 Ashton Bldg., Grand Rapids
Wahby, Elmer F.....Butterworth Hosp., Grand Rapids
Waterman, Donald F.....68 Ransom N.E., Grand Rapids
Webber, Jerome E.....310 E. Fulton St., Grand Rapids
Weller, Keith E., Lt. (MC) (M).....
Naval Hosp., Great Lakes, Ill.

Wells, S. M.....407 Metz Bldg., Grand Rapids
Wenger, Aaron V. (E)..302 Loraine Bldg., Grand Rapids
Wenger, John N.....Coopersville
Whalen, John M. (M).....Staff Medical Officer, Dept. of Pacific, 100 Harrison St., San Francisco, Calif.
Whinery, J. B. (E).....
1403 Green Cove Road, Winter Park, Fla.
Whinery, Joseph F.....16 Monroe Ave., Grand Rapids
Whittenberger, Robert N. (A).....
1164 Griswold S.E., Grand Rapids
Wiarda, Roy J.....1539 Plainfield N.E., Grand Rapids
Wiese, John L.....310 E. Fulton St., Grand Rapids
Wilkes, John B.....1810 Division S., Grand Rapids
Williams, John R.....1733 Union Ave. S.E., Grand Rapids
Willits, Paul W.....Blodgett Med. Bldg., Grand Rapids
Wilson, William E. (R).....
37 Prospect Ave. N.E., Grand Rapids
Winfield, Emory D.....457 Burton S.E., Grand Rapids
Winter, Garrett E.....1967 Godfrey S.W., Grand Rapids
Wright, Thomas B.....1571 Wealthy S.E., Grand Rapids
Wurz, John F.....412 Med. Arts Bldg., Grand Rapids
Yared, Jerome A.....1974 S. Division, Grand Rapids
Yegge, J. P.....Kent City

LAPEER COUNTY

Bishop, G. Clare.....Almont
Boruch, Leon R.....Drawer "A", Lapeer
Buchanan, Thomas.....Imlay City
Burley, David H. (E).....Almont
Chapin, Clarence D.....Columbiaville
Dorland, Clarke.....Lincoln St., Lapeer
Doty, James R.....Clay St., Lapeer
Leith, Dorothy L.....Imlay City
McBride, John R.....915 Liberty St., Lapeer
Merz, Henry G. (E).....Lapeer
O'Brien, Daniel J.....Nepessing St., Lapeer
Rehn, Adolph T.....
Asst. Med. Supt., Lapeer State Home, Lapeer
Smith, Glen L.....131 E. Third St., Imlay City
Thomas, J. Orville (E).....North Branch
Zemmer, Harry B.....Clay St., Lapeer
Zolliker, C. R.....P.O. Drawer A, Lapeer

LENAWEE COUNTY

Benz, Carl A.....150 Toledo St., Adrian
Blair, Thomas H.....Nat. Bk. Bldg., Adrian
Blanchard, L. E.....301½ W. Main St., Hudson
Blanden, Merwin R.....Ford Bldg., Tecumseh
Claxton, W. T.....136 Chicago St., Britton
Dustin, Richard E.....103 E. Chicago, Tecumseh
Eddy, H. R. C.....114 Nat. Bk. Bldg., Adrian
Hamilton, J. D. (M).....122 Toledo St., Adrian
Hammel, Richard T.....Tecumseh
Harrison, Robert E.....418 W. Adrian St., Blissfield
Heffron, Charles H.....909 E. Butler, Adrian
Heffron, Howard H.....231 N. Main St., Adrian
Helzerman, Ralph F.....112 S. Ottawa St., Tecumseh
Hewes, A. B.....146 E. Maumee St., Adrian
Hewes, William H.....146 E. Maumee St., Adrian
Hinshaw, Warren V.....139½ N. Main St., Adrian
Hofstra R.....119 W. Church St., Adrian
Hornsby, W. B.....132 E. Chicago St., Clinton
Huebner, R. J.....Addison
Hunter, T. B.....201 Nat. Bk. Bldg., Adrian
Isley, Homer E.....115 W. Adrian St., Blissfield
Loveland, Horace H. (E)....220 Chicago Blvd., Tecumseh
Marsh, R. G. B.....610 W. Logan St., Tecumseh
Miller, Perry L.....310 E. Maumee, Adrian
Morden, Esli T. (E).....109 E. Maumee St., Adrian
O'Connor, Archie.....Clinton
Parker, D. A.....454 S. Main St., Adrian
Pasternacki, A. S.....206 E. Front St., Adrian
Patmos, Bernard.....127½ E. Maumee St., Adrian
Purfield, Wm. P.....545 W. Main St., Manchester
Raabe, E. C.....124 North St., Morenci
Rawson, A. P.....Addison
Rogers, John D.....146 Toledo St., Adrian
Sayre, P. P.....121 N. Main St., Onsted
Stark, Emily S.....155 E. Maumee St., Adrian
Thompson, J. R., Jr. (A).....
106 E. Chicago Blvd., Tecumseh
Tubbs, R. V.....120 E. Adrian St., Blissfield
VanDusen, Chad A.....RFD No. 2, Blissfield
Whitehouse, Keith H.....118 W. Main St., Morenci
Wilson, George.....Clinton
Wynn, G. H.....147 E. Church St., Adrian

LIVINGSTON COUNTY

Barton, Thomas A.....116 N. Michigan Ave., Howell
Clarke, Niles A.....723 Spencer Road, Brighton
Cook, C. L.....Howell
Duffy, Ray M.....250 E. Main, Pinckney
Glenn, Bernard H.....Fowlerville
Hauer, R. F.....Fowlerville
Hendren, J. J.....Fowlerville
Hill, H. C.....116 N. Michigan, Howell
Huntington, Harry G.....104 W. Grand River, Howell
May, Lewis E.....924 W. Grand River Ave., Howell
McDowell, Guy Marshall (L).....Elks Club, Bay City
McGregor, A. J.....300 E. Grand River, Brighton
Nicholas, Mildred V.....Michigan Sanatorium, Howell
Perry, Florence J. C...17640 San Rosa, Rt. 3, Birmingham
Polack, R. T.....Mich. State San., Howell
Scheafer, Joseph C.....Mich. State Sanatorium, Howell
Schenden, A. J.....6335 W. M36, Pinckney
Sigler, Hollis L.....110 N. Michigan, Howell
Walker, Enos G.....4485 Cordley Lake Road, Lakeland

LUCE COUNTY

Campbell, Earl H. (E).....Newberry
Gibson, Robert E. L.....Newberry
Hicks, R. P.....228 Newberry Ave., Newberry
Purmort, William R., Jr.....Newberry
Streitwieser, Robert J...Newberry State Hosp., Newberry
Surrell, Matthew A.....Newberry
Swanson, George F.....
VA Hosp., University & Woodland Ave., Phila. 4, Pa.
Thompson, T. W.....Newberry State Hosp., Newberry

MACOMB COUNTY

Adler, Morton W.....19188 Appoline Ave., Detroit
Banting, O. Fenton.....Richmond
Barker, John G.....8050 Warren Blvd., Centerline
Bower, A. B.....Armada
Brady, Milo J.....21509 Eleven Mile Rd., St. Clair Shores
Bryce, James W.....25020 Van Dyke, Centerline

Buckley, Daniel J.....160 S. Walnut, Mt. Clemens
Croman, Joseph M. Jr.....117 Cass Ave., Mt. Clemens
Curatola, Victor (M).....1401 Garfield, Fairfield, Calif.
Curlett, James E. (L).....26765 Gratiot, Roseville
Dudzinski, Edmund J.....New Baltimore
Engels, John A.....Richmond
Goldman, B. J.....409 Monitor Leader Bldg., Mt. Clemens
Hartmann, W. B.....1416 S. Gratiot, Mt. Clemens
Heine, Austin W.....99 S. Gratiot, Mt. Clemens
Henkin, W. A.....610 Monitor Leader Bldg., Mt. Clemens
Isbey, Edward K.....25020 Van Dyke, Centerline
Jewell, James H.....18215 Utica Road, Roseville
Juliar, Joseph F...302 Monitor Leader Bldg., Mt. Clemens
Kane, W. J.....401 Monitor Leader Bldg., Mt. Clemens
Lynch, Russell E.....25020 Van Dyke, Centerline
Maguire, A. J.....4875 Van Dyke Ave., Utica
Mattes, Max W...610 Monitor Leader Bldg., Mt. Clemens
Moore, George F.....
410 Monitor Leader Bldg., Mt. Clemens
Mulligan, Philip T.....91 Cass St., Mt. Clemens
Reichman, Joseph J.....
312 Monitor Leader Bldg., Mt. Clemens
Reitzel, Rufus H.....199 S. Gratiot, Mt. Clemens
Reizen, Maurice S.....23700 Van Dyke Ave., Van Dyke
Revere, J. O.....192 S. Gratiot, Mt. Clemens
Rickman, L. D.....10 Howard St., Mt. Clemens
Rivard, Charles L...20825 Mack Ave., Grosse Pte. Woods
Roth, George E.....19136 Mendota Ave., Detroit
Rothman, Arthur M.....22552 Gratiot, East Detroit
Ruedisueli, Clarence A.....18215 Utica Road, Roseville
Salot, Russell F...713 Monitor Leader Bldg., Mt. Clemens
Scher, Joseph N.....130 Cass Ave., Mt. Clemens
Scher, Sydney.....132 Cass Ave., Mt. Clemens
Siegfried, Edward G.....30781 Division St., New Haven
Singer, Nelson.....22422 Gratiot, East Detroit
Smith, Milton C.....50 S. Gratiot, Mt. Clemens
Stone, Elizabeth A.....Romeo
Stryker, Oscar D.....
Macomb Co. Health Dept., Mt. Clemens
Sturm, Fred A.....29405 Jefferson, St. Clair Shores
Test, Frederick C. II.....91 Cass Ave., Mt. Clemens
Thompson, Alfred A.....126 Cass Ave., Mt. Clemens
Ullrich, Russell W.....91 Cass Ave., Mt. Clemens
Weiss, Jack I.....13301 Ludlow, Huntington Woods
Wellard, Henry C.....New Baltimore
Whitley, Alec.....31017 Jefferson, St. Clair Shores
Wiley, D. Bruce.....45310 Van Dyke, Utica
Wyte, William C.....170 Eastman, Mt. Clemens
Zavela, Daniel.....22644 Gratiot Ave., East Detroit

MANISTEE COUNTY

Grant, C. L. (R).....
5990 Lake Shore Rd., Rt. 1, Box 452, Manistee
Hansen, Earnest C.....78 Maple, Manistee
Konopa, John F.....57 Poplar St., Manistee
Lalime, Ruth E.....Bear Lake
Lewis, Lee A. (E).....467 Second St., Manistee
Miller, Ernest B.....425 River St., Manistee
Oakes, Ellery A.....401 River St., Manistee
Ogilvie, Gordon D.....210 Savings Bk. Bldg., Manistee
Osborn, Marjory G.....
Health Dept., Savings Bank Bldg., Manistee
Osborn, Samuel, Jr.....90 Maple St., Manistee
Ramsdell, Homer A.....Engelman Bldg., Manistee
Rowe, R. E., Capt. (M).....Post Disp., Ft. Wayne, Detroit
Schwarz, Marlowe L.....Onekama

MARQUETTE-ALGER COUNTIES

Acocks, J. R.....Morgan Heights San., Marquette
Amolsch, Arthur L.....St. Luke's Hosp., Marquette
Baron, Benzoin C.....Munising
Bennett, Arthur K. (L)..Union Nat. Bk. Bldg., Marquette
Bennett, M. C.....Union Nat. Bk. Bldg., Marquette
Berry, R. F.....Bacon Bldg., Marquette
Bertucci, J. P.....114 S. Front St., Ishpeming
Bolitho, T. B.....425 E. Michigan Ave., Marquette
Casler, W. L.....131 E. Ridge, Marquette
Cooperstock, Moses.....418 W. Magnetic, Marquette
Corcoran, W. A.....Anderson Bldg., Ishpeming
Drury, Charles P.....Marquette Health Office, Marquette
Elzinga, Eugene R.....315 N. Front St., Marquette
Erickson, Arvid W.....114 Front St., Ishpeming
Fennig, F. A.....315 N. Front St., Marquette
Harkin, John C.....207 Savings Bk. Bldg., Marquette
Hirwas, C. L.....Huetter Bldg., Marquette
Hornbogen, D. P.....Hornbogen Bldg., Marquette
Howe, Lloyd W.....Savings Bk. Bldg., Marquette
Jaedecke, R. G.....114 Front St., Ishpeming
Keskey, George I.....105 S. Front St., Marquette
Knutson, George O.....Twin City Hosp., Negaunee
Kronschnabel, E. F.....Gwinn
Lambert, W. C.....Huetter Bldg., Marquette
LeGolvan, Celestin....221 W. Washington St., Marquette
LeGolvan, Paul C. (M).....
Brooke Army Hosp., San Antonio, Tex.
Lyons, James W., Jr.....First Nat. Bldg., Marquette
Matthews, Norman L.....St. Lukes Hosp., Marquette
Moore, Bert.....Ishpeming Hosp., Ishpeming
Mudge, William A.....314 Teal Lake Ave., Negaunee
Narotzky, Archie S.....Odd Fellows Bldg., Ishpeming
Nicholson, J. B.....Savings Bk. Bldg., Marquette
Paine, R. L.....416 Teal Lake, Negaunee
Schweinsberg, Sara D.....Savings Bk. Bldg., Marquette
Sicotte, Isaiah (L).....Michigamme
Swinton, A. L. (E).....Savings Bk. Bldg., Marquette
Tearnan, Raymond A.....Munising
Van Riper, Paul (L).....Champion
Waldie, George M.....Ispheming Hosp., Ispheming
Wickstrom, George B.....Madigan Bldg., Munising
Williams, R. G.....Ishpeming

MASON COUNTY

Bacon, Herbert G., Jr.....Scottville
Boldyreff, Ephraim B.....Custer
Boon, A. Floyd (M).....
102½ W. Ludington Ave., Ludington
Carney, John R.....202 N. Park, Ludington
Carney, Ruth V. C.....202 N. Park, Ludington
Goulet, Leo J.....222 S. James St., Ludington
Hoffman, Howard B.....121 Ludington Ave., Ludington
Martin, William S.....107 W. Ludington Ave., Ludington
Ostrander, Robert A.....121 Ludington Ave., Ludington
Paukstis, Charles A.....111 East Court St., Ludington
Slaybaugh, James C.....101 W. Loomis St., Ludington

MECOSTA-OSCEOLA-LAKE COUNTIES

Anderson, Gordon H.....309 N. Michigan, Big Rapids
Bruggema., Jacob.....Evart
Chess, Leo F.....232 Chestnut St., Reed City
Franklin, Benjamin L. (E).....Remus
Ivkovich, Paul .....111 S. Chestnut St., Reed City
Kilmer, David N.....102½ Upton, Reed City
Kilmer, Paul B.....102½ Upton, Reed City
Kowaleski, Edward H.....Remus

Merlo, Frank A.....206 S. Michigan Ave., Big Rapids
Mitchell, H. C.....124 Mecosta Ave., Big Rapids
Nelson, Lorenzo R.....Baldwin
Peck, Louis K. (E).....Barryton
Treynor, Thomas P.....126 Maple St., Big Rapids
VanAuken, Edward W.....126 Maple St., Big Rapids
White, John A.....121 S. Michigan Ave., Big Rapids
Yeo, Gordon H.....126 Maple St., Big Rapids

MENOMINEE COUNTY

Agneberg, Nils O.....531 First St., Menominee
Brukardt, Herman R...Electric Square Bldg., Menominee
Clay, Joel W. (A).....1031 First St., Menominee
DeWane, Francis J.....413 Tenth Ave., Menominee
DeWane, James N.....413 Tenth Ave., Menominee
Flanagan, Clarence B.....534 First St., Menominee
Glickman, L. Grant.....958 First St., Menominee
Gonty, Arthur.....St. Joseph's Hosp., Menominee
Heidenreich, John R.....Daggett
Higley, R. A.....1146 10th Ave., Menominee
Jones, William S.....1146 10th Ave., Menominee
Jones, W. S., Jr.....1146 10th Ave., Menominee
Kaye, John T.....1005 10th Ave., Menominee
Kerwell, Karm C.....Stephenson
Peterson, Allen R.....Daggett
Sethney, Henry T.....Electric Square Bldg., Menominee
Sweany, S. K.....Pinecrest San., Powers
Towey, John W.....Pinecrest San., Powers

MIDLAND COUNTY

Ballmer, Robert S.....144 W. Main, Midland
Bernier, J. A.....Sanford
Blackhurst, R. T.....Arcade Bldg., Midland
Bowsher, Robert E.....2719 Ashman St., Midland
Bulmer, Dan J.....402 E. Ellsworth, Midland
Buskirk, Maurice D.....201 Reinhart Bldg., Midland
Gay, Harold H.....Dow Chemical Co., Midland
Gibson, R. E.....363 Brown St., Beaverton
Gordon, Harold L.....Dow Chemical Co., Midland
Grewe, Norman C.....347½ E. Main St., Midland
Gronemeyer, William H.....127 MacDonald, Midland
Hautau, Emily R.....401 W. Main St., Midland
High, C. V., Jr. (R).....2100 Isabella Road, Midland
Howe, Irvin M.....217 Reinhart Bldg., Midland
Ittner, Martin J.....2912 Ashman St., Midland
Kaasa, Laurin J.....Midland Hosp., Midland
Kilian, D. J.....3611 Jefferson, Midland
Linsenmann, Karl W.....312 E. Main St., Midland
MacCallum, Charles L.....221 Reinhart Bldg., Midland
Maynard, W. A.....Coleman
Meisel, Edward H., Jr.....413 Lingle Lane, Midland
Murphy, John E.....119 Gordon St., Midland
Pike, Melvin H.....209 Reinhart Bldg., Midland
Poznak, Leonard A.....1411 Crane Court, Midland
Randolph, Stephen H.....117 Gordon St., Midland
Sherk, Joseph H.....Masonic Bldg., Midland
Towsley, W. D.....Arcade Bldg., Midland
Willison, Charles H.....122 Townsend, Midland

MONROE COUNTY

Ames, Florence D.....2 W. Noble Ave., Monroe
Blakey, L. C.....222 N. Monroe St., Monroe
Bond, W. W.....4 East Front St., Monroe
Cigany, Zoltan B.....1402 Monroe, Carleton
Dusseau, S. V. (E).....Erie
Ewing, R. T.....130 Maple Blvd., Monroe
Flanders, J. P.....31 Washington, Monroe
Frary, R. A.....423 E. Elm Ave., Monroe
Freud, John W.....222 N. Monroe, Monroe
Gelhaus, Wm. J.....4 East Front St., Monroe
Golinvaux, C. J.....9508 Harding Ave., Miami Beach, Fla.
Hensel, Hilda M. E.....12 East Fourth, Monroe
Hunter, M. A.....35 East Front St., Monroe
Johnson, A. Esther.....31 Washington Ave., Monroe
Kelso, S. Newton, Jr.....9 South Monroe St., Monroe
Laboe, Edward W.....106 E. Front St., Monroe
Lammers, Gerald P.....Ida
Landon, Herbert W. (E).....512 Washington, Monroe
Long, Edgar C.....127 E. Front St., Monroe
Long, Sara J.....130 Maple Blvd., Monroe
McDonald, T. A.....7 E. Front St., Monroe
McGeoch, R. W.....633 N. Macomb, Monroe
McMillin, J. H.....423 E. Elm St., Monroe
Meier, Walter A.....106 E. Front St., Monroe
Newcomer, Sheldon R.....31 Washington Ave., Monroe
Parmelee, O. E. (L).....Lambertville
Pinkus, Hermann K. B.....12 E. Fourth St., Monroe
Reisig, Albert H.....5 E. Front St., Monroe
Sanger, Emerson J. J.....3 E. Front St., Monroe
Tomlinson, Ledyard H.....Newport
Wagar, Spencer H.....31 Washington St., Monroe
Williams, Robert J.....31 Washington St., Monroe
Williamson, George W.....284 Tecumseh St., Dundee

MUSKEGON COUNTY

Anderson, A. J.....1371 Peck St., Muskegon
Anderson, Axel W.....Lakewood Club, Twin Lake
Atkinson, Annie L.....525 Seventh St., Muskegon
August, R. V.....72 E. Broadway, Muskegon Heights
Barnard, Helen S.....Nedeau Bldg., Muskegon
Benedict, Arthur L.....22 W. Southern Ave., Muskegon
Bloom, C. J. (L).....59 E. Larch St., Muskegon
Bolthouse, Robert E.....1214 Peck St., Muskegon Heights
Bond, Wm. H.....1377 Peck St., Muskegon
Boyd, D. R.....1735 Peck Street, Muskegon
Bradshaw, Park S.....1014 Jefferson, Muskegon
Busard, J. Max.....503 Muskegon Bldg., Muskegon
Chapin, William S. (A).....
638 Sanford St., Muskegon Heights
Christophersen, James W.....Hackley Bk. Bldg., Muskegon
Clapp, Henry W.....88 Strong Ave., Muskegon
Clark, Harry L.....Hackley Hospital Lab., Muskegon
Closz, Harold F.....809 Hackley Union Bank, Muskegon
Cohan, Sol G.....1114 Second St., Muskegon
Cronick, Anne B.....1067 Pine St., Muskegon
Dasler, A. F.....4177 Highgate, Roodmont, Muskegon
Diskin, Frank.....410 Jackson Ave., Muskegon
Dykhuizen, Harold D.....
710 Hackley Union Bank Bldg., Muskegon
Ellis, Nicholas J.....1883 Lake Shore Drive, Muskegon
Emerick, Robert W.....878 N. Second St., Muskegon
Engstrom, Albert O.....Whitehall
Fillingham, Enid.....870 N. Second St., Muskegon
Fleischmann, C. B.....250 W. Webster, Muskegon
Fleishman, Norman A.....1094 Jefferson, Muskegon
Gaikema, Everett W.....Muskegon Co. San., N. Muskegon
Garber, Frank W., Jr.....1178 Third St., Muskegon
Gillard, James L.....208 Mich. Theater Bldg., Muskegon
Goltz, Martha H.....Montague
Greene, Henry P.....764 Pine St., Muskegon
Griffith, Robert M.....1217 Fifth Ave., Muskegon
Hagen, William A.....1255 Palmer Blvd., Muskegon
Hanley, W. J.....405 Hackley Union Bldg., Muskegon

Harryman, James E.....1129 Peck St., Muskegon
Hartwell, Shattuck W.....452 W. Western Ave., Muskegon
Heneveld, Edward H.....1603 Peck St., Muskegon
Heneveld, John.....1603 Peck St., Muskegon
Heneveld, Capt. Robert G., MC 01920986, CPSA (M)
A.P.O. 613 c/o P.M., San Francisco, Calif.
Hennessy, Mary E.....503 Muskegon Bldg., Muskegon
Holly, Leland E.....876 Second St., Muskegon
Holmes, Roy H.....316 Hackley Union Bldg., Muskegon
Jiroch, John T. (A)....513 E. Walnut St., Louisville, Ky.
Joistad, Arthur H., Jr.....878 N. Second St., Muskegon
Kane, Thomas J.....179 Strong Ave., Muskegon
Kay, Cecelia S.....1533 Peck St., Muskegon
Keilin, Marie.....403 Michigan Theater Bldg., Muskegon
Kerr, Howard J.....1441 Lakeshore Drive, Muskegon
Lapham, Landon M.....Whitehall
Lange, Eugene W.....Hackley Hospital, Muskegon
Lauretti, Emil J.....815 Hackley Union Bldg., Muskegon
Laurin, Vilda S.....804 Hackley Bank Bldg., Muskegon
LeFevre, Louis L.....450 W. Western Ave., Muskegon
LeFevre, William M.....289 W. Western Ave., Muskegon
Loder, Leonel L.....Hackley Union Bldg., Muskegon
Loomis, J. L. (R).....424 Cross St., Ann Arbor
Mandeville, C. B.....
515 Hackley Union Bank Bldg., Muskegon
Maples, Douglas E.....402 Center St., North Muskegon
McNair, John N.....967 Second St., Muskegon
Medema, Paul E.....1017 Sanford, Muskegon
Meengs, Marvin B.....1725 Peck St., Muskegon
Miller, Philip L.....1755 Peck St., Muskegon
Mulder, Lambertus.....Hackley Union Bldg., Muskegon
Mulligan, A. W.....1260 Jefferson St., Muskegon
Myer, Clifton G.....1075 Jefferson St., Muskegon
Oden, Constantine L. A.....
804 Hackley Union Bank Bldg., Muskegon
Powers, Lunette I. (E).....337 Morris Ave., Muskegon
Prentice, Edwin W.....1017 Sanford St., Muskegon
Price, Leonard.....1282 Arthur St., Muskegon
Pyle, Henry J.....506 Muskegon Bldg., Muskegon
Risk, Robert D.....1160 Ransom St., Muskegon
Rooks, Wendell H.....101 E. Forest Ave., Muskegon
Scholle, Norbert W.....1001 Peck St., Muskegon Heights
Sears, Richard B.....Court House, Muskegon
Shebasta, Emil M.....1075 Jefferson, Muskegon
Smith, M. Luther.....840 Pine St., Muskegon
Swartout, W. C. (L).....
514 Hackley Union Bank Bldg., Muskegon
Swenson, Leland L.....1724 Peck St., Muskegon
Teifer, Charles A.....407 Muskegon Bldg., Muskegon
Tellman, H. Clay.....Hackley Bank Bldg., Muskegon
Thieme, S. W. (L).....Ravenna
Thornton, Eugene S.....
802 Hackley Union Bank Bldg., Muskegon
Toy, Charles M.....1067 Pine St., Muskegon
Tyler, William H.....1435 Peck St., Muskegon
Vanderlaan, John E.....1624 Peck St., Muskegon
Van Gelder, W. E.....Hackley Union Bk. Bldg., Muskegon
Wagenaar, Edward H.....404 Muskegon Bldg., Muskegon
White, W. G., Jr.....1735 Peck St., Muskegon
Wiersma, Silas C.....Hackley Union Bldg., Muskegon
Wildgen, Bernard C.....416 Hackley Bk. Bldg., Muskegon
Wilke, Carl A.....Montague
Williams, Edward V...905-A Jarman St., Muskegon Hts.

NEWAYGO COUNTY

Deur, T. R.....Grant
Geerlings, Lambert J.....20 N. Division St., Fremont
Geerlings, Ralph W.....20 N. Division St., Fremont
Klein, J. Paul.....16 W. Sheridan, Fremont
Masters, Brooker L.....43 W. Main, Fremont
Moore, Hugh R.....38 State St., Newaygo
O' Neill, John W.....351 E. Cherry St., Fremont
VandenBerg, Tunis.....20 N. Division Ave., Fremont

NORTH CENTRAL

Backe, John C.....Box 434, Gaylord
Balice, F. W.....117 N. Third St., West Branch
Barstow, Richard G.....Gaylord
Boehm, John D. (R).....West Branch
Clippert, Clarence G.....308 Michigan Ave., Grayling
Coulter, Keith D.....Gladwin
Egle, Joseph L.....Northern Michigan TB San., Gaylord
Hasty, Earl A.....115 Burgess, West Branch
Hayes, Louis F.....300 McClellan, Grayling
Henig, B. Elmore.....308 Michigan Ave., Grayling
Jardine, Hugh M.....109 S. Third St., West Branch
Keyport, Claude R.....308 Michigan Ave., Grayling
Kitti, William H.....Kalkaska
Libke, Robert S.....Gaylord
Martzowka, M. A.....Roscommon
McKillop, G. L.....Gaylord
Peckham, Richard C.....Gaylord
Schaiberger, George L...707 W. Hought St., West Branch
Stealy, Stanley A.....Box 485, Grayling
Timreck, Harold A.....Gladwin
Van Ostan, O. A.....115 Burgess, West Branch

NORTHERN MICHIGAN MEDICAL SOCIETY

Alm, Bernhard T. (M).....
4405 Ocean Drive, Ft. Lauderdale, Fla.
Blum, Benjamin B.....Petoskey
Burns, Dean C.....314½ Howard St., Petoskey
Conkle, Guy C. (E).....Boyne City
Conti, Joseph B.....Petoskey
Conway, William S.....Burns Clinic, Petoskey
Crippen, Edward F.....126½ State Street, Mancelona
Drake, Gerald A.....Petoskey
Duffie, Donald H.....Central Lake
Grate, Lawrence E.....304 Mason St., Charlevoix
Hegener, A. J.....Petoskey
Kirk, T. R.....Petoskey
Larson, Walter E.....214 N. Main St., Cheboygan
Lawrie, Guy K. (M).....575th Medical Squadron
Base Post Office—Box 205, Selfridge AFB
Lentini, Nicholas.....Cheboygan
Lilga, Harris V.....113 Howard St., Petoskey
Litzenburger, Albert F.....Boyne City
Love, James M.....Burns Clinic, Petoskey
Martin, R. G.....Cheboygan
Mateskon, V. S.....Burns Clinic, Petoskey
Mayne, Frederick C.....Cheboygan
McEvoy, Francis J.....245 E. Main St., Harbor Springs
Palmer, Russell E.....Charlevoix
Pearson, R. E.....Boyne City
Reus, Leonard W.....Petoskey
Rodger, John R.....Bellaire
Saltonstall, Gilbert B.....112 Clinton St., Charlevoix
Savory, John H.....East Jordan
Stringham, James R.....225 Backus St., Cheboygan
Terr, Isaac.....Charlevoix
Vail, Harry F.....St. James
Van Dellen, Jerrian.....East Jordan
Weburg, Kathryn D.....Petoskey
Wood, George H.....Onaway

Abbott, James A.....Pontiac State Hosp., Pontiac
Abbott, Vernon C.....1405 Pontiac State Bldg., Pontiac
Adair, Robin.....1016 N. Hunter Blvd., Birmingham
Adams, Frederick M.....Fox & Hounds, Bloomfield Hills
Arnkoff, Harry.....305 First Nat. Bk. Bldg., Pontiac
Aulie, H. G.....500 S. Washington, Royal Oak

Baker, Frederick A.....907 Pontiac State Bk., Pontiac
Baker, Robert H.....1110 Pontiac State Bk. Bldg., Pontiac
Bannow, Robert J.....704 Pontiac State Bk. Bldg., Pontiac
Barefield, A. S.....20879 Bethlawn, Ferndale
Barker, Charles P.....Pontiac State Hosp., Pontiac
Barker, Howard B.....1006 Riker Bldg., Pontiac
Bauer, Edward G.....101½ N. Saginaw, Pontiac
Bauer, Ernest W.....23005 John R. St., Hazel Park
Beattie, W. G.....Professional Bldg., Ferndale
Beck, Otto O.....280 W. Maple, Birmingham
Bedwell, William L.....Pontiac State Hospital, Pontiac
Beebe, Willard E.....1411 Pontiac State Bk., Pontiac
Belknap, Warren F.....1809 S. Main St., Royal Oak
Berg, R. H.....2 S. Washington, Oxford
Berger, Charles J.....1413 S. Washington Ave., Royal Oak
Birmingham, J. R.....2331 Ardmore, Ferndale
Blackwell, Leonard.....549½ N. Perry St., Pontiac
Blakeney, James.....449 E. Pike St., Pontiac
Blue, Jane.....218 Riker Bldg., Pontiac
Bonner, Hugh (A).....
c/o Sweany, 4064 Rose Hill Ave., Cincinnati, Ohio
Boucher, R. E...617 Washington Square Bldg., Royal Oak
Bowers, Charles L.....Riker Bldg., Pontiac
Bullard, R. W., Jr.....20 S. Main St., Clarkston
Burgess, Charles M.....23235 Woodward Ave., Ferndale
Burke, Chauncey G.....1022 Riker Bldg., Pontiac
Butler, Samuel A. (L).....Pontiac State Hosp., Pontiac
Byberg, R. A. (M).....500 S. Washington, Royal Oak

Calhoun, Ethel T.....707 Lakeview, Birmingham
Campbell, Malcolm D.....
216 Washington Square Bldg., Royal Oak
Carrow, Joyce M.....622 Riker Bldg., Pontiac
Cefai, A. F.....412 Peoples State Bldg., Pontiac
Christie, E. A.....412 Riker Bldg., Pontiac
Cobb, Leon F.....83½ N. Saginaw, Pontiac
Cobb, Thomas H.....804 Riker Bldg., Pontiac
Collins, Edward F.....26½ Huron, W., Pontiac
Conrad, C. D.....3027 Woodward, Royal Oak
Cooley, Roy V., Jr.,.....189 Orchard Lake Ave., Pontiac
Cooper, Robert J.....622 Riker Bldg., Pontiac
Coucke, Henry O.....18475 San Jose Blvd., Birmingham
Crissman, H. C.....22748 Woodward Ave., Ferndale
Cudney, Ethan B.....Pontiac Motor Division, Pontiac

Dahlgren, C. W...301½ Orchard Lake Rd., Keego Harbor
Darling, C. G., Jr.....1025 Riker Bldg., Pontiac
Darmstaetter, A. A., Jr.....222 E. Maple, Birmingham
DeLawter, Hilbert H.....
1298 Brookwood Lane, Birmingham
Deutsch, William L.....600 W. First, Huntington Woods
Dobski, Edwin J.....236 Riker Bldg., Pontiac
Dunlap, G. L.....2925 Orchard Lake Ave., Keego Harbor
Dunn, Lewis E.....5876 Thomas, Berkley
Durak, Gerald G...611½ S. Washington Ave., Royal Oak
Durocher, Normand E.....
605 Pontiac State Bk. Bldg., Pontiac

Edwards, J. W.....8400 W. Eight Mile Rd., Ferndale
Ekelund, Clifford T.....906 Riker Bldg., Pontiac
Endress, Z. F., Jr. (M).....206 Oneida Drive, Pontiac
Evseeff, George S.....307 W. Sixth St., Royal Oak

Farnham, Lucius A. (L).....538 Riker Bldg., Pontiac
Feeffe, Eugene.....c/o St. Joseph Hosp., Pontiac
Ferris, Ralph G.....205 Hanna Bldg., Birmingham
Fink, L. Jerome....1411 Pontiac State Bk. Bldg., Pontiac
Fitzpatrick, Francis J.....818 Peoples Bk. Bldg., Pontiac
Flick, John R.....120 West Second, Royal Oak
Foust, Earl W.....1625 E. Fourth St., Royal Oak
Fox, Ralph M.....205 Wabeek Bldg., Birmingham
Furlong, Harold A.....932 Riker Bldg., Pontiac

Gaba, H. B.....21721 Dequindre, Hazel Park
Gadbaw, Joseph J.....23603 Farmington Rd., Farmington
Gaensbauer, Ferdinard.....932 Riker Bldg., Pontiac
Gariepy, Bernard F.....109 W. First St., Royal Oak
Gates, E. M.....206 Riker Bldg., Pontiac
Gatley, C. R.....33 Barbour Terrace, Bloomfield Hills
Gatley, L. Warren.....97 N. Perry St., Pontiac
Gehringer, Norman F.....336 Riker Bldg., Pontiac
Geib, Ormond D.....Avon Bldg., Rochester
Geist, Edgar J.....Hills Theater Bldg., Rochester
Gerls, Frank B.....602 Peoples State Bk. Bldg., Pontiac
Gibson, James C. (E).....206 E. Commerce, Milford
Gibson, Richard E.....1011 Hazel St., Birmingham
Gibson, Wellington C.....216 Commerce St., Milford
Gill, Matthew J.....324 Riker Bldg., Pontiac
Goode, Norman J., Jr.....109 E. Nine Mile, Ferndale
Gradolph, Paul L.....23338 Woodward Ave., Ferndale
Grant, William A. (L).....Milford
Green, J. D. (M).....
217 Briggs Bldg., 222 E. Maple, Birmingham
Green, William M...1402 Pontiac State Bk. Bldg., Pontiac

Hackett, Daniel J.....1205 Peoples State Bk. Bldg., Pontiac
Haddock, D. A.....5780 Lakeview, Rt. 5, Pontiac
Hagman, George L.....Cranbrook School, Bloomfield Hills
Halsted, Lee H.....33311 Grand River, Farmington
Hammonds, E. E.....209 Wabeek Bldg., Birmingham
Han, Maolin.....3358 Auburn Rd., Auburn Heights
Hanna, Carl W.....c/o Fisher Body Division, Pontiac
Hardy, George C.....
240 Oak Dr., Box 135-G, Route 2, Rochester
Harvey, Campbell.....832 Riker Bldg., Pontiac
Hasner, Robert B...617 Washington Sq. Bldg., Royal Oak
Hassberger, J. B.....316 Wabeek Bldg., Birmingham
Hathaway, Clarence L.....33 S. Broadway, Lake Orion
Hathaway, W. S.....433½ Main St., Rochester
Heitch, William C. (A).....
Pontiac General Hosp., Pontiac
Henderson, James (A).....Pontiac Gen. Hosp., Pontiac
Hendren, Owen S...1408 Pontiac State Bk. Bldg., Pontiac
Henry, Colonel R.....Professional Bldg., Ferndale
Hensley, C. B.....46 W. Flint St., Lake Orion
Hershey, Lynn N.....
Rt. 1, 31275 Franklin Blvd., Birmingham
Hoekman, Aben.....1740 Hamilton Dr., Rt. 3, Pontiac
House, W. W.....8400 Eight Mile Rd., Ferndale
Howlett, E. V. (L).....538 Riker Bldg., Pontiac
Hoyt, Donald F.....1203 Pontiac State Bk. Bldg., Pontiac
Huber, Philip J.....10 Peterboro, Detroit
Hubert, John R., Jr.....606 Riker Bldg., Pontiac
Hull, Robert P.....23625 Woodward Ave., Ferndale

Kemp, Felix J.....1115 Peoples State Bk. Bldg., Pontiac
Kemp, W. L.....450 Maple Rd., Birmingham
Kendrick, H. F.....97 N. Perry, Pontiac
Klewicki, H. A.....125 W. Nine Mile, Ferndale
Koehler, William H.....
629 Washington Square Bldg., Royal Oak
Kozonis, M. C.....1006 Riker Bldg., Pontiac
Kuhn, Henry H.....817 E. Eight Mile Rd., Hazel Park
Kuhn, R. E. (M).....1706 West Blvd., Berkley

Lahti, Paul T...325 Washington Square Bldg., Royal Oak
LaMarche, Norman O.....2827 Woodward, Berkley
Lambert, Alvin G...3027 N. Woodward Ave., Royal Oak
Lambie, John S. (L).....280 Aspen Rd., Birmingham
Larson, Alvin R.....640 Riker Bldg., Pontiac
Laux, Philip J., Jr.....3027 N. Woodward, Royal Oak
Leaky, Etta Link.....600 11 Mile Rd., Berkley
Levine, Bernard.....25101 Coolidge, Oak Park
Lewis, S. M.....400 W. Nine Mile, Ferndale
Ling, Theodore W.....23603 Farmington Rd., Farmington
Lockwood, C. E.....107 Martha St., Holly
Lowery, A. J.....8124 Meadow, Route 5, Pontiac

MacKenzie, O. R.....128 Common St., Walled Lake
Margrave, Edmund D...306 W. Ten Mile Rd., Royal Oak
Markle, John G.....617 Washington Sq. Bldg., Royal Oak
Markley, John M.....849 W. Huron St., Pontiac
Mason, Robert J.....308 N. Woodward Ave., Birmingham

McConkie, J. P.....311 Wabeek Bldg., Birmingham
McNeill, H. H.....83½ S. Saginaw, Pontiac
Mehas, C. P.....100 W. Square Lake Rd., Pontiac
Meinke, Herman A.....817 E. 8 Mile Rd., Hazel Park
Meisner, Harry E.....10851 W. Ten Mile Rd., Oak Park
Meng, R. H.....Troy
Mercer, Frank A.....1401 Pontiac State Bk. Bldg., Pontiac
Merrill, Lionel N...330 Washington Sq. Bldg., Royal Oak
Milgrom, Sidney.....1229 W. Washington, Royal Oak
Miller, Hazen L.....617 Washington Sq. Bldg, Royal Oak
Miller, Sidney.....391 Hamilton Ave., Birmingham
Moloney, J. Clark.....414 Arlington, Birmingham
Monroe, John D.....Oakland Co. Health Dept., Pontiac
Morton, James A.....St. Joseph Mercy Hosp., Pontiac
Mumby, Clinton J.....Pontiac State Bk. Bldg., Pontiac
Naz, John F.....20 S. Main St., Clarkston
Neafie, Charles A. (L).....
Pontiac City Health Dept., Pontiac
Nessel, J. H. (M)..Naval Air Sta., Corpus Christie, Tex.
Newcomb, Arnold B.....P.O. Box 1036, Berkley
Norup, John.....2818 Coolidge Hwy, Berkley
Nosanchuk, Joseph I.....
1215 Pontiac State Bk. Bldg., Pontiac
Olsen, Richard E.....St. Joseph Mercy Hosp., Pontiac
Palmer, Hayden D.....506 Riker Bldg., Pontiac
Pauli, Theodore H.....206 Riker Bldg., Pontiac
Payton, Charles F.....611½ S. Washington, Royal Oak
Pearce, James F.....114 S. Washington, Royal Oak
Pelletier, Charles J.....1914 Dusetta, Royal Oak
Petroff, George N...1301 Pontiac State Bk. Bldg., Pontiac
Phillips, George H.....Oakland Co. TB San., Royal Oak
Porritt, Ross J.....304 Riker Bldg., Pontiac
Ports, Preston W.....33109 Grand River, Farmington
Prather, F. W.....Milford
Prevette, Isaac C.....215 First Nat. Bk. Bldg., Pontiac
Quarton, Albert E., Jr.....3027 N. Woodward, Royal Oak
Raynale, George P. (L)....302 Wabeek Bldg., Birmingham
Read, James A.....612 E. Maple, Birmingham
Reid, Fred T.....Clawson State Bk. Bldg., Clawson
Riddle, John (M).....Pontiac State Hosp., Pontiac
Riggs, Harry L.....42½ S. Saginaw, Pontiac
Riker, Aaron D.....1012 Riker Bldg., Pontiac
Roehm, Harold R.....322 Wabeek Bldg., Birmingham
Rowley, L. G.....4400 Dixie Hwy., Drayton Plains
Rupp, Edson C., Jr.....Washington Sq. Bldg., Royal Oak
Russell, V. P.....624 Wash. Sq. Bldg., Royal Oak
Ruva, J. J.....4463 Dixie Hwy., Drayton Plains
St. John, Harold A.....718 Riker Bldg., Pontiac
Schlecte, I. C.....Rochester
Schuneman, Howard....23760 Woodward, Pleasant Ridge
Seaborn, A. J.....1412 S. Washington St., Royal Oak
Segula, R. L.....326 Riker Bldg., Pontiac
Shadley, Maxwell L.....84 Ottawa Dr., Pontiac
Sheffield, Loren C.....420 Riker Bldg., Pontiac
Sheridan, F. Michael.....
1307 S. Washington, Huntington Woods
Sibley, H. A. (L).....15 Mathews St., Pontiac
Sigler, Louis E., Jr.....920 James K. Blvd., Pontiac
Simpson, E. K.....804 Pontiac State Bk. Bldg., Pontiac
Smith, Carleton A.....822 Riker Bldg., Pontiac
Smith, Donald S.....824 Riker Bldg., Pontiac
Smith, Ellen B.....Pontiac State Hosp., Pontiac
Smith, George E.....629 Washington Sq. Bldg., Royal Oak
Spencer, Lloyd H.....1302 S. Washington, Royal Oak
Spoehr, Eugene L.....22832 Woodward, Ferndale
Spohn, Earl W.....201 S. Center St., Royal Oak
Stageman, John C...1203 Pontiac State Bk. Bldg., Pontiac
Stahl, Harold F.....Oxford
Stanley, W. F.....1148 S. Woodward, Royal Oak
Starker, C. T. (L).....
716 Community Nat. Bk. Bldg., Pontiac
Steffes, Everette M.....3345 Coolidge Hwy., Berkley
Steinberg, Norman N.....
211 Washington Sq. Bldg., Royal Oak
Stevens, John M., Jr.....Pontiac State Hosp., Pontiac
Stolpman, A. K.....306 Wabeek Bldg., Birmingham
Sullenberger, Neil H.....
1301 Pontiac State Bk. Bldg., Pontiac
Sutton, Palmer E...629 Washington Sq. Bldg., Royal Oak
Swickle, Edward F.....17 S. Main, Clawson
Tauber, Abraham....1108 Peoples State Bk. Bldg., Pontiac
Tolle, Charles B.....202 Riker Bldg., Pontiac
Tourkow, L. P.....Pontiac State Hosp., Pontiac
Uloth, Milton J. (L).....Ortonville
VandenBerg, Kenneth..711 Comm. Nat. Bk. Bldg., Pontiac
Van Haltern, H. L.....Riker Bldg., Pontiac
Virga, George M.....715 N. Main St., Royal Oak
Wagner, Ruth E.....201 First St., Royal Oak
Wake, Douglas L.....1307 S. Washington, Royal Oak
Watson, Thomas Y.....313 Wabeek Bldg., Birmingham
Weisberg, William W...29201 Coolidge Hwy., Royal Oak
Wessels, Robert R.....302 Wabeek Bldg., Birmingham
White, R. H.....379 Hamilton, Birmingham
Whitehouse, John D.....Pontiac State Hosp., Pontiac
Wigent, Ralph D.....171 Crestwood, Pontiac
Williams, John P.....1102 Peoples State Bk. Bldg., Pontiac
Willis, Maurice E...1107 Pontiac State Bk. Bldg., Pontiac
Young, Arthur R.....906 Riker Bldg., Pontiac
Zimmerman, Walter J.....2946 Bacon St., Berkley
Zujko, Alphonse J.....
1402 Pontiac State Bk. Bldg., Pontiac

OCEANA COUNTY

Diehl, Clarence.....Shelby
Flint, Charles H.....315 State St., Hart
Hasty, Willis A.....405 State St., Shelby
Hayton, A. R. (L).....327 Michigan Ave., Shelby
Heard, William H.....Grand Haven
Munger, L. P. (E).....Hart
Nicholson, John H. (E).....Hart
Reetz, Fred A. (A).....Shelby
Robinson, Wm. G.....35 State St., Hart
Vrbanac, John J.....Hart
Wood, Merle G.....19 Courtland St., Hart

ONTONAGON COUNTY

Hogue, H. B.....Ewen
Lahti, Carl R.....800 Zinc St., Ontonagon
Strong, William F.....800 Chippewa, Ontonagon

OTTAWA COUNTY

Arendshorst, Wm., Jr. (M).....Peoples Bk. Bldg., Holland
Beernink, E. H.....222½ Washington St., Grand Haven
Bloemendaal, D. C.....47 E. Main St., Zeeland
Bloemendal, W. B.....300 Franklin St., Grand Haven
Boersma, Vernon L.....64 West 14th St., Holland
Boone, Coneilius E.....101½ E. Main St., Zeeland
Bulthuis, Jerry E.....Jamestown
Clark, Nelson H.....11 West Eighth St., Holland
Cook, Carl S.....Holland
DeVries, H. G.....36 East Eighth St., Holland
DeYoung, F. W.....Spring Lake
Frieswyk, Melvin J.....241 E. Main, Zeeland
Groat, Frank L.....414 Franklin St., Grand Haven
Hager, Ralph.....Hudsonville
Hamelink, M. H.....Holland
Harms, H. P.....2 East Eighth St., Holland

Kearney, Joseph B.....33 West Eighth St., Holland
Kemme, Gerrit J.....Rt. 3, Zeeland
Kitchel, John H.....414 Franklin St., Grand Haven
Kitchel, Mary S.....414 Franklin St., Grand Haven
Kools, William C.....14 W. 8th St., Holland
Kuipers, S. W.....Holland
Leenhouts, Abraham (E).....Holland
Long, C. E. (L).....222 Franklin St., Grand Haven
Michmerhuizen, R. E. (A).....
Woodbury St., Warm Springs, Ga.
Moerdyk, William J.....132 E. 12th St., Holland
Nichols, Rudolph H.....33 W. 8th St., Holland
Nykamp, Russell.....39 E. Main, Zeeland
Rypkema, W. M.....228½ Washington St., Grand Haven
Schaftenaar, R. H.....210 River St., Holland
Stobbelaar, Robert.....107 S. 2nd St., Grand Haven
Ten Have, Ralph.....1016 Sheldon, Grand Haven
Ten Pas, Henry.....Hamilton
Timmerman, E. C.....Coopersville
Van Appledorn, C. J.....99 West 23rd St., Holland
Van Der Berg, E. E.....Holland
van der Velde, Otto.....35 W. 8th St., Holland
VandeWaa, Alfred J.....200 E. Main St., Zeeland
Van Kolken, P. J.....Grand Haven
VerDuin, J. W.....223 Washington, Grand Haven
Wells, Kenneth N.....Spring Lake
Westrate, Warren K.....Holland
Westrate, William.....Holland
Westrate, William, Jr.....17 West Tenth St., Holland
Winter, John K.....10 E. 10th St., Holland
Winter, William G., Jr.....Holland
Yonkman, Frederick F.....58 Pomery Rd., Madison, N. J.

SAGINAW COUNTY

Ackerman, G. L.....124 S. Jefferson Ave., Saginaw
Albers, M. J.....1227 N. Michigan Ave., Saginaw
Alger, George David.....1839 N. Michigan Ave., Saginaw
Anderson, William K.....404 S. Warren Ave., Saginaw
Bagley, Ulysses S.....1401½ N. Sixth St., Saginaw
Beckett, M. B.....1500 Weiss St., Saginaw
Berberovich, Thomas F.....
2005½ N. Michigan Ave., Saginaw
Bishop, H. M.....515 S. Jefferson, Saginaw
Brender, Fred P.....Frankenmuth
Brock, W. H. (L).....9 Merrill Bldg., Saginaw
Bruggers, Lawrence.....1703 N. Michigan Ave., Saginaw
Bruton, Martin F.....315 S. Jefferson Ave., Saginaw
Bucklin, Robert V.....1447 N. Harrison, Saginaw
Bullington, Bert M...Room 213, Bearinger Bldg., Saginaw
Busch, F. J.....1731 N. Michigan, Saginaw
Butler, Milton G.....502 S. Jefferson, Saginaw
Cady, F. J.....402 S. Jefferson, Saginaw
Cady, F. J., Jr.....402 S. Jefferson, Saginaw
Cambridge, V. W.....400½ Potter St., Saginaw
Cameron, A. K.....
409 First Savings & Loan Bldg., Saginaw
Campbell, Lloyd A.....
405 First Savings & Loan Bldg., Saginaw
Catizone, Roy J.....Merrill
Caumartin, Hugh T.....1007 Congress, Saginaw
Chisena, Peter R.....6227 Dixie Highway, Bridgeport
Claytor, Archer A.....1000½ N. Third Ave., Saginaw
Comer, Walter H.....701 2nd Nat. Bank Bldg., Saginaw
Cortopassi, Andre J.....324 S. Washington, Saginaw
Cortopassi, Vital E.....324 S. Washington Ave., Saginaw
Cory, Charles W.....1227 N. Michigan, Saginaw
Curts, James H.....127 S. Washington, Saginaw
Durman, Donald C.....408 S. Jefferson, Saginaw
Ely, Cecil W.....1820 Janes St., Saginaw
Ernst, Arthur R. (R).....443 S. Weadock, Saginaw
Fink, Robert L., Lt. (MC) (M).....
U. S. Naval Hospital, Great Lakes, Ill.
Fleschner, Thomas E.....Birch Run
Friedrick, David F. (M).....3225th ATRC, Williams AFB
Chandler, Arizona
Gage, David P...514 First Savings & Loan Bldg., Saginaw
Galsterer, Edwin C.....
507 First Savings & Loan Bldg., Saginaw
Gamon, A. E.....514 First Savings & Loan, Saginaw
Gardner, J. H.....815 N. Michigan Ave., Saginaw
Gomon, Louis D.....308 Eddy Building, Saginaw
Grigg, Arthur (E).....320 N. Michigan Ave., Saginaw
Grigg, Arthur P.....320 N. Michigan Ave., Saginaw
Hand, Eugene A.....211 Bearinger Bldg., Saginaw
Harvie, L. C.....405 Wiechmann Bldg., Saginaw
Heavenrich, Robert M.....529 W. Genesee, Saginaw
Helmkamp, Herbert O.....333 So. Jefferson, Saginaw
Hester, Eustace G.....2031 N. Michigan Ave., Saginaw
Hill, Victor L.....518 Janes St., Saginaw
Hohn, Fred J. (L).....407 Wiechmann Bldg., Saginaw
Howell, D. M.....506 Wiechmann Bldg., Saginaw
Jaenichen, Robert F. T.....530 Hayden, Saginaw
James, J. W.....1021 W. Genesee, Saginaw
Jiroch, Ralph S.....202 Wiechmann Bldg., Saginaw
Johnstone, K. J.....Sag. Mall. Iron Central Fdry.,
63 Florence Ave., Saginaw
Jordan, Leo A.....1524 E. Genesee, Saginaw
Kemp, J. N. (L).....1320 S. Michigan Ave., Saginaw
Kerr, William B.....300 S. Michigan, Saginaw
Keyes, James T.....Birch Run
Kickham, Edward F.....309 S. Jefferson Ave., Saginaw
Kleekamp, Herbert G.....1005 Gratiot Ave., Saginaw
Kolesar, R. C.....2702 S. Washington, Saginaw
Kowals, Francis V.....6th and N. Washington, Saginaw
Kretschmer, T. V.....308 Wiechmann Bldg., Saginaw
Kruger, Harold F.....703 W. Genesee St., Saginaw
LaPorte, Lawrence A.....1121 N. Michigan, Saginaw
Lassignal, J. C.....2125 Bay St., Saginaw
Ling, Ernest M. (R).....Spring Lake
Ling, Kenneth C.....Box 135, Hemlock
Lohr, Oliver W.....537 Millard St., Saginaw
Luger, Frederick E.....303 N. Jefferson, Saginaw
Lurie, Robert I.....2525 S. Washington, Saginaw
Lyle, Richard C.....Bridgeport
MacKinnon, E. D.....1616 Court St., Saginaw
MacMeekin, James W.....1213 N. Michigan, Saginaw
Manning, John E.....815 N. Michigan, Saginaw
Manning, J. W., III.....515 N. Jefferson, Saginaw
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Beck, Frank K.....901 Lapeer, Port Huron
Beer, Joseph F.....104 N. Riverside, St. Clair
Benjamin, Clayton C. (L).....600 Park St., Port Huron
Biggar, R. J.....
Bahrein Petro. Co., Ltd., Bahrein Island, Persian Gulf
Borden, Charles L.....216 Sperry Bldg., Port Huron
Bottomley, Thomas H., Jr.....1102 Sixth St., Port Huron
Boughner, Walter H.....328 Pleasant St., Algonac
Bovee, M. E.....2208 Stone St., Port Huron
Bowden, William S.....137 Water St., Marine City
Brush, Howard O.....612 Peoples Bk. Bldg., Port Huron
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Davison, William T.....312 Sperry Bldg., Port Huron
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Fitzgerald, E. W.....204 Fox Bldg., Port Huron
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Gilmore, John R...317 Mich. Nat. Bk. Bldg., Port Huron
Hazledine, Herbert J.....
301 Michigan Bank Bldg., Port Huron
Holcomb, R. J.....141 Main St., Marine City
Hoyt, Charles N.....940 Military St., Port Huron
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Braham, Wilbur G.....105 Lakeview, Sturgis
Brunson, Allen E.....104 S. Clay, Sturgis
Fiegel, Samuel A.....500 Michigan, Sturgis
Fortner, Roscoe J.....137 Portage, Three Rivers
Gillespie, Eleanor M.....104 W. Chicago, Sturgis
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Lamb, Harry.....101 N. Maple St., Sturgis
Lepard, Olin L.....101 N. Maple, Sturgis
Miller, Charles G.....106 W. Chicago Rd., Sturgis
O'Dell, C. W.....117 Spring St., Three Rivers
O'Dell, J. H., Jr.....117 Spring St., Three Rivers
Olney, Harold E.....Leonidas
Pennington, H. C.....White Pigeon
Penzotti, S. C.....117 Spring St., Three Rivers
Shaw, G. D.....117 Spring St., Three Rivers
Sheldon, John P.....104 S. Clay, Sturgis
Slote, Leal K. (E).....157 S. Washington, Constantine
Springer, R. A.....Centerville
Sweetland, George J.....240 W. Second, Constantine
Tesar, Frank J.....104 W. Market, Centerville
Weisheit, H. R.....504 E. Chicago Rd., Sturgis
Zimont, Raymond D.....100 S. Washington, Constantine

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Blanchard, Ernest W.....Deckerville
Ford, Frances A.....Applegate
Gift, Weldon A.....Marlette
Hart, Robert K.....Howard St., Croswell
Jayson, Michael H.....Marlette
McCrea, John W.....Marlette
McGunegle, K. T.....Sandusky
Muir, Neil.....Croswell
Seager, M. C.....Brown City
Tweedie, G. Evans.....Sandusky
Tweedie, S. Martin.....Sandusky

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Bach, Norman F. .....113 E. Williams St., Owosso
Brown, Richard C. .....113 E. Williams St., Owosso
Brown, Richard J. .....113 E. Williams, Owosso
Buzzard, Walter D. .....Chesaning
Chipman, E. M. .....502 W. Williams, Owosso
Graves, James H. .....511 W. Main St., Owosso
Gurden, Elizabeth L. .....113 E. Williams St., Owosso
Harkness, Carleton A. .....113 E. Williams St., Owosso
Harroun, John E. .....306 Matthews Bldg., Owosso
Hoshal, Verne L. .....Durand
Hume, Arthur M. (E) .....224 N. Ball, Owosso
Janci, Julius S. .....215 E. Mason St., Owosso
Lanting, Roelof .....Court House, Corunna
Lieber, Robert W. .....202 E. First St., Perry
McKnight, Edwin R. ....320 N. Washington Ave., Owosso
Merz, Walter L. .....224 N. Ball St., Owosso
Pochert, R. C. .....Matthews Bldg., Owosso
Richards, Chester J. .....Durand
Sahlmark, Joseph F. .....812 Bradley, Owosso
Sheperd, W. F. .....Matthews Bldg., Owosso
Weinkauf, William F.....Corunna
Weston, C. L. .....Matthews Bldg., Owosso
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TUSCOLA COUNTY

Ballard, James H. .....Cass City
Barbour, Harry A. (L) .....Mayville
Cook, R. R.....Akron
Dickerson, Willard W. .....Caro State Hospital, Caro
Donahue, H. T.....Cass City
Elmendorf, Edward N. .....Vassar
Flett, Richard O. .....Millington
Gilbert, Donald E. .....Mayville
Gugino, F. J.....Reese
Howlett, R. R. .....624 W. Frank St., Caro
Kaven, G. H. (L) .....Unionville
Merrill, E. H.....Caro
Morris, Frank L. .....Cass City
Nigg, Herbert L. .....Caro
Pelczar, W. E. ....511 N. Main St., South Bend, Indiana
Savage, L. L.....Caro
Starmann, B. H.....Cass City
Swanson, E. C. .....Vassar
Von Renner, Otto (L).....Vassar

VAN BUREN COUNTY

Boothby, Carl F. .....Hartford
Boothby, F. M. .....Lawrence
Boothby, Paul R.....Lawrence
Bope, William P. (E) .....Decatur
Buckborough, M. W. .....South Haven
Copeland, Evan L. .....Decatur
Diephuis, Bert .....South Haven
Dillon, Thomas J. .....RFD No. 3, Paw Paw
Gano, Avison .....Bangor
Giffen, John R. (E) .....Bangor
Hoyt, W. F. (E) .....Paw Paw
Itzen, J. F. .....South Haven
Kleber, John A. .....South Haven
Loomis, F. J. .....Paw Paw
McFadden, R. I. .....Bloomingdale
Penoyar, C. L. .....South Haven
Saunders, Kenneth .....Holly
Spalding, R. W. .....Gobles
Staggs, Adelbert L. .....Hartford
Steele, Arthur H. .....Paw Paw
Ten Houten, Charles .....Paw Paw
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Bank of South Haven Bldg, South Haven
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Parnall, Christopher G.....
209 First National Bank Bldg., Ann Arbor
Peery, James B. (A).....University Hospital, Ann Arbor
Petrohelos, Manousos A.....32 N. Washington, Ypsilanti
Pinkham, R. A. (A).....University Hospital, Ann Arbor
Pitts, Kenneth E. (A)....Ypsilanti State Hosp., Ypsilanti
Pollard, H. Marvin.....University Hospital, Ann Arbor
Potter, Marcia L.....318 W. Cross St., Ypsilanti
Price, Helen F.....103 S. W. Trick Bldg., Ann Arbor
Prout, Gordon J. .....Saline
Quinn, James R. (A)....511 Pontiac St. Bk. Bldg., Pontiac
Rae, James W.....University Hospital, Ann Arbor
Ransom, Henry K.....1402 Washington Hgts., Ann Arbor
Raphael, Theophile....Univ. Health Service, Ann Arbor
Rapp, Robert (A).....University Hospital, Ann Arbor
Ratliff, Rigdon K.....St. Joseph's Mercy Hosp., Ann Arbor
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116 Williams St., Larkspur, California
Rekshan, W. R.....Beyer Memorial Hospital, Ypsilanti
Reynolds, Ernest W., Jr. (A)....Univ. Hosp., Ann Arbor
Reynolds, Robert M. (A).....
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Riggs, Harold W.....St. Joseph's Mercy Hosp., Ann Arbor
Robinson, O. J., Jr.....501 Dunlap, Northville
Robinson, William D.....University Hospital, Ann Arbor
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Rottschaefer, Wm. (A)....University Hospital, Ann Arbor
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Saunders, Allen.....820 Catherine St., Ann Arbor
Sayre, George S.....220 Pearl St., Ypsilanti
Schlacht, G. F.....37064 Goddard Rd., Romulus
Schneider, R. C.....University Hospital, Ann Arbor
Schumacher, William E...303 First Nat. Bldg., Ann Arbor
Scovill, Henry A.....1313 W. Cross St., Ypsilanti
Seevers, Maurice H.....
Dept. Pharmacology-Med. Sch., Ann Arbor
Seime, Reuben I.....11 N. Hamilton St., Ypsilanti
Seltzer, Holbrooke S. (A)....University Hosp., Ann Arbor
Sheldon, John M.....University Hospital, Ann Arbor
Shoecraft, Harriet L.....326 E. Liberty, Ann Arbor
Sink, Emory W.....725 N. University, Ann Arbor
Sirola, Olga L.....School of Health,
Michigan State Normal College, Ypsilanti
Slenger, Walworth R.....309 S. State, Ann Arbor
Smith, Eleanor....202 Michigan Theatre Bldg., Ann Arbor
Smith, R. F. (A).....1007 W. Cross St., Ypsilanti
Sparling, Irene L. M.....251 E. Main St., Northville
Spears, Clarence W.....302 W. Cross St., Ypsilanti
Spencer, Herbert H. (M)....38 Maywood, Pleasant Ridge
Stocker, Marvin L.....116 N. Adams, Ypsilanti
Stout, Wallace C. (A)....University Hospital, Ann Arbor
Struthers, J. N. P.....Box A, Ypsilanti St. Hosp., Ypsilanti
Stubbart, F. James (A)....University Hospital, Ann Arbor
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Sweet, Robert B.....University Hospital, Ann Arbor
Taylor, William B.....University Hospital, Ann Arbor
Teed, Reed W.....215 A S. Main, Ann Arbor
Thieme, E. Thurston.....
St. Joseph's Mercy Hospital, Ann Arbor
Thompson, R. F. (A).....
St. Joseph's Mercy Hospital, Ann Arbor
Towsley, Harry A.....University Hospital, Ann Arbor
Treat, D. F. (A).....19206 Lancashire Rd., Detroit 23
Tschumy, William O. (A)....University Hosp., Ann Arbor
Tupper, Charles J. (A).....
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Valder, David C. (A)....University Hospital, Ann Arbor
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Waldron, Alexander M.....1130 Hill St., Ann Arbor
Walton, R. G. (A).....University Hospital, Ann Arbor
Washburne, Charles L. (L).....
St. Joseph's Mercy Hospital, Ann Arbor
Watson, Ernest H.....280 Barton Drive, N., Ann Arbor
Westerberg, Martha R.....University Hospital, Ann Arbor
Wessinger, J. A. (E)....339 E. Washington St., Ann Arbor
Westcott, George W.....511 W. Michigan, Ypsilanti
Westover, Charles J...982 W. Ann Arbor Trail, Plymouth
Wetterstroem, R. G.....501 W. Dunlap St., Northville
Whitehouse, Walter M.....University Hospital, Ann Arbor
Wicht, Paul J.....1385 W. Michigan Ave., Ypsilanti
Wile, Udo J. (L)....511 First Nat. Bank Bldg., Ann Arbor
Wille, W. S.....VA Rehabilitation Center,
University Hospital, Ann Arbor
Williams, Gail H. (A).....Barnett, Mo.
Williams, Howard R.....200 N. Ingalls, Ann Arbor
Williamson, Frederick B.....319 W. Michigan, Ypsilanti
Wilson, James L.....University Hospital, Ann Arbor
Wisdom, Inez R.....705 N. University, Ann Arbor
Wollum, Arnold (M)..U.S. Naval Hosp., Annapolis, Md.
Woods, J. J.....19 N. Washington, Ypsilanti
Worth, Melissa H. C.....15 N. Adams St., Ypsilanti
Wright, P. E.....948 Cooper St., Jackson
Wright, Walter J. (E).....417 W. Cross St., Ypsilanti
Wylie, William C. (L).....Dexter
Wyman, J. S.....1 Ruthven Pl., Ann Arbor
Yoder, O. R.....Ypsilanti State Hospital, Ypsilanti
Zerbi, Victor M.....315 N. Adams St., Ypsilanti

Abruzzo, Anthony M.....Wayne Co. Gen. Hosp., Eloise
Adamian, Gerald D.....10 Peterboro, Detroit
Adams, James R.....14741 Michigan Ave., Dearborn
Adelson, Sidney L.....16221 Schoolcraft, Detroit
Adler, Sidney.....872 Fisher Bldg., Detroit
Agnew, George H.....559 Fisher Bldg., Detroit
Agnone, Eugene J.....1420 St. Antoine St., Detroit 26
Agranoff, Bernard W. (A)....3230 Calvert St., Detroit 6
Aiuto, James J.....660 Cadieux Rd., Grosse Pointe 30
Akroyd, Cecil..... ....3841 Junction, Detroit
Alderman, R. F.....16880 Gilchrist St., Detroit
Aldrich, E. Gordon....14239 Chandler Park Drive, Detroit
Alexander, Eugene J.....Henry Ford Hospital, Detroit
Alford, Barry H.....930 E. Ann Arbor Rd., Plymouth
Alford, E. S., Lt. Col. (M).....
Base Hospital, Landley Air Force Base, Va.
Allen, John V.....1336 Southfield, Detroit
Alles, Russell W.....968 Fisher Bldg., Detroit
Allison, Herbert C.....81 Kercheval, Grosse Pointe Farms
Alper, Louis.....20401 Schaefer Highway, Detroit 35
Alpern, Elliott B.....2840 W. 7 Mile Rd., Detroit
Alpiner, Sam.....2850 E. 7 Mile Rd., Detroit
Altman, Raphael.....1052 Maccabees Bldg., Detroit
Altshuler, Abraham M.....508 Fox Theater Bldg., Detroit
Altshuler, C. H.....Wayne County General Hosp., Eloise
Altshuler, Ira M.....512 Fox Theater Bldg., Detroit 1
Altshuler, S. S., Major (M)..Vet. Hosp., Tuscon, Arizona
Amos, Thomas G.....201 Curtis Bldg., Detroit
Anderson, Bruce (E)....2579 Silver Lake Rd., Pontiac 17
Anderson, C. P.....334 Bates, Detroit 19
Anderson, James O.....641 David Whitney Bldg., Detroit
Anderson, Walter L.....5902 Jos Campau, Detroit
Anderson, Walter T.....923 David Whitney Bldg., Detroit
Anderson, Wm. H. (M).....
3241 Livingston St., N.W., Washington, D. C.
Andries, George H.....951 Fisher Bldg., Detroit 2
Andries, Raymond C...1737 David Whitney Bldg., Detroit
Ankley, J. W.....16620 E. Warren, Detroit 24
Annessa, Domenico M.....3536 Burns, Detroit
Anslow, Robert E.....10 Peterboro St., Detroit 1
Appelman, Howard B.....
1014 David Broderick Tower, Detroit
Archambault, Henry A.....1076 Maccabees Bldg., Detroit
Archambault, R. F.....35550 Michigan Ave., Wayne
Arehart, Burke W.....17600 Harper Ave., Detroit
Arent, J. G.....12600½ Grand River Ave., Detroit
Arminski, Thomas C.....1066 Fisher Bldg., Detroit
Armstrong, Arthur G.....530 Fisher Bldg., Detroit
Armstrong, M. J.....15125 Grand River, Detroit
Arnold, Effie E.....10 Peterboro, Detroit
Aronstam, Noah E. (E)....654 Maccabees Bldg., Detroit
Arrington, Robyn J.....7811 Oakland, Detroit
Ascher, Meyer S.....942 Maccabees Bldg., Detroit
Ashe, Robert M.....6838 Park Ave., Allen Park
Ashley, L. Byron.....113 Martin Place, Detroit
Ashton, F. B. (L)....18 Winona Ave., Highland Park 3
Asselin, D. R.....1208 David Whitney Bldg., Detroit
Asselin, Regis F.....14935 E. Warren, Detroit 24
Athay, Roland M. ....Wayne Co. General Hosp., Eloise
Atler, Lawrence R.....681 W. Forest, Detroit
Atler, LeRoy L.....4847 Third Ave., Detroit
Auble, Max E.....2501 W. Grand Blvd., Detroit 8
August, Harry E.....1242 Maccabees Bldg., Detroit 2
Auld, Douglas DeV.....275 W. Grand Blvd., Detroit 16
Avrin, Ira.....10821 Puritan, Detroit
Axelrod, A. R.....15920 Linwood, Detroit
Axelrod, Mildred A.....13725 Eight Mile Rd., Detroit 35
Axelrod, Robert G.....18518 Appoline, Detroit 35
Axelson, A. U.....7310 Grand River Ave., Detroit 4

Babcock, Kenneth B.....Grace Hospital, Detroit 1
Babcock, Lloyd K.....16420 Schoolcraft, Detroit
Babcock, Myra E.....7 Poplar Park, Pleasant Ridge
Babcock, Warren W.....868 Fisher Bldg., Detroit
Bach, Walter F.....5419 Livernois, Detroit 10
Bachman, Morris E.....569 Fisher Bldg., Detroit 2
Bacon, Vinton A.....4819 W. Fort St., Detroit 9
Bader, Benjamin H.....5210 Third Ave., Detroit 2
Baeff, Michael A. (R).....15435 Stahelin, Detroit 23
Baer, George J.....707 David Whitney Bldg., Detroit 26
Baer, Raymond B.....7815 E. Jefferson, Detroit 14
Bagley, Harry E.....7541 Oakman Blvd., Dearborn
Bahra, Robert J.....24621 Gardner, Oak Park
Bailey, Carl C.....9203 Grand River, Detroit 4
Bailey, D. A.....3300 Woodstock Drive, Detroit 21
Bailey, L. J.....620 Vinewood Ave., Birmingham
Bailey, William A.....20924 Outer Drive, Dearborn
Baima, Margaret A.....1326 St. Antoine, Detroit 26
Baker, Clarence (L).....19182 Patton Ave., Detroit 19
Baker, F. E.....8005 Dexter Blvd., Detroit
Baker, H. A. (M)....U.S.S. Baltimore, F.P.O. New York
Bakst, Joseph A.....10 W. Warren, Detroit 1
Balaga, Frank T.....9701 Jos Campau, Detroit 12
Balberor, Harry.....275 W. Grand Blvd., Detroit 16
Balcerski, Matthew A.....10 Peterboro, Detroit 1
Ballard, C. S. (R).....370 Chalmers Ave., Detroit
Ballard, Donald R.....10149 Michigan Ave., Dearborn
Balser, Charles W.....13931 Gratiot, Detroit 5
Baltz, James I.....Henry Ford Hospital, Detroit 2
Barak, Lewis R.....7448 W. 7 Mile Rd., Detroit
Baran, A. W.....15841 W. Warren, Detroit
Barbaglia, L. C.....16378 Harper, Detroit
Barber, Radivoj.....504 S. Main St., Plymouth
Barenholtz, Benjamin.....674 Maccabees Bldg., Detroit
Barker, David H.....7220 Gratiot Ave., Detroit 13
Barland, Oscar L.....8703 Oakland, Detroit
Barnes, Donald J.....564 Fisher Bldg., Detroit 2
Barnett, Edwin Dwight.....
Columbia Univ., 600 W. 168th St., New York 32, New York
Barnett, Louis L.....1806 David Broderick Tower, Detroit
Barnett, Morton.....1527 David Stott Bldg., Detroit 26
Barnett, Saul E.....744-6 Lathrop, Detroit 1
Barone, C. G.....13535 Woodward, Detroit
Barrett, C. Dale, Jr.....
Detroit Dept. of Health, 334 Bates St., Detroit 26
Barrett, Raymond J.....2258 Webb, Detroit 6
Barrett, Wyman D...311 David Whitney Bldg., Detroit 26
Barron, James.....Henry Ford Hospital, Detroit
Barron, William H.....14938 Livernois, Detroit
Bartemeier, Leo H.....8-259 General Motors Bldg., Detroit
Barton, Joseph R.....7503 W. Warren, Detroit 10
Bash, Nicholas P.....Veterans Admin. Hosp., Dearborn
Bassett, Louis H.....8100 E. Jefferson, Detroit
Batchelor, M. T.....7600 John R. St., Detroit
Bates, G. S.....1144 David Whitney Bldg., Detroit 26
Bauer, A. Robert.....19268 Grand River, Detroit 23
Bauer, Benedict J.....7615 Dexter Blvd., Detroit 6
Bauer, Lester Eugene.....859 Fisher Bldg., Detroit
Baumer, Moe.....701 Kales Bldg., Detroit
Baumgarten, Elden C.....8045 E. Jefferson, Detroit
Baumgarten, T. W. (A).....8045 E. Jefferson, Detroit
Beach, Watson.....742 Maccabees Bldg., Detroit
Beam, A. Duane.....85 Kercheval, Detroit 30
Beamer, George D.....13810 Michigan Ave., Dearborn
Beattie, Robert (L)....1229 David Whitney Bldg., Detroit
Beaver, Donald C.....432 E. Hancock, Detroit 1
Beavers, Robert M.....2043 McDougall, Detroit 7
Becker, Abraham....1414 David Brod. Tower, Detroit 26
Becker, Joseph W.....407 Kales Bldg., Detroit 26
Becklein, Clarence L.....14351 E. Warren Ave., Detroit 13
Beckwith, Carl C.....15625 Twelfth St., Detroit 3
Beecher, A. J.....20390 Harper, Detroit
Beckwitt, M. C.....865 Fisher Bldg., Detroit
Bedell, A. A.....15545 Mack Ave., Detroit
Beeuwkes, L. E.....12922 W. Warren, Dearborn
Behn, Claud W.....1546 David Whitney Bldg., Detroit
Beigler, Sydney K.....513 David Whitney Bldg., Detroit
Beitman, Max R.....510 Kales Bldg., Detroit 26
Belanger, Ernest E.....10593 W. Jefferson, River Rouge
Belanger, W. G.....552 Fisher Bldg., Detroit 2

Belisle, John A.....Wayne County Hospital, Eloise
Bell, J. Kenner....1654 First National Bank, Detroit 26
Benjamin, William O.....1037 Green Avenue, Detroit 9
Bennett, Germany E.....5144 Hastings, Detroit 11
Bennett, Harry B.....942 Maccabees Bldg., Detroit 2
Bennett, Sanford A.....17904 John R St., Detroit 3
Bennett, Wm. E.....12897 Woodward, Detroit
Bennett, Zina B.....Michigan Mutual Hospital, 2730 E. Jefferson St., Detroit 7
Benson, Clifford D.....1515 David Whitney Bldg., Detroit
Benson, Davis A.....3706 Sturtevant, Detroit 6
Benson, P. J.....2900 S. Ford St., Detroit
Benson, Virginia M.....16238 Snowden Ave., Detroit 27
Bentley, Frederick E.....861 Penniman Bldg., Plymouth
Bentley, Neil I. (L)..1165 David Whit. Bldg., Detroit 26
Berge, Clarence A.....14309 E. Jefferson, Detroit 15
Berger, Edwin L.....Guimaraes Clinic, 7301 Schaefer, Dearborn
Bergman, Murray Stewart....4400 Livernois, Detroit 10
Bergman, Theodore I.....16455 Woodward, Detroit 3
Bergo, Howard L. (M).....17141 Griggs, Detroit 21
Berke, Sydney S.....3333 E. Jefferson, Detroit
Berkey, William E. (R)....915 Andres, Coral Gables, Fla.
Berlien, Ivan C.....1753 Guardian Bldg., Detroit 26
Berlin, Allen.....722 Maccabees Bldg., Detroit 2
Berman, Lawrence.....1516 St. Antoine St., Detroit 26
Berman, Robert..1304 David Broderick Tower, Detroit 26
Berman, Sidney L.....60 W. Hancock, Detroit 1
Bernard, Walter G.....13002 E. Jefferson Ave. Detroit 15
Bernbaum, Bernard .....17320 Livernois, Detroit
Bernstein, Albert E. (L).....2400 Boston Blvd., Detroit 2
Bernstein, Samuel S.....18200 Wyoming, Detroit
Berry, Jos. E.....18268 Grand River, Detroit 23
Besancon, J. H.....1510 David Broderick Tower, Detroit
Best, T. H. Edward.....9221 E. Jefferson, Detroit
Bethea, J. Hardee.....1005 Kales Bldg., Detroit 26
Bicknell, Edgar A.....13641 Wyoming, Detroit 21
Bicknell, Frank B.....938 David Whitney Bldg., Detroit
Bielawski, John G.....8124 E. Morrow Circle, Detroit 4
Billingslea, Thomas H.....2175 E. Willis, Detroit
Birch, John R.....1010 Maccabees Bldg., Detroit 2
Bird, H. Waldo, Jr.....1865 Guardian Bldg., Detroit
Birkelo, Carl C.....Herman Kiefer Hosp., Taylor & Hamilton, Detroit 2
Birndorf, Leonard.....18004 John R., Detroit
Bittker, Isadore Irving....616 Professional Bldg., Detroit 1
Bittrich, Norbert M.....Providence Hosp., 2500 W. Gd. Blvd., Detroit 8
Bjork, Floyd J.....15705 W. Seven Mile Rd., Detroit
Black, Perry S.....19431 Van Dyke, Detroit 12
Blain, Alexander W.....2201 E. Jefferson St., Detroit 7
Blain, Alexander W. III..2201 E. Jefferson St., Detroit 7
Blain, James H., Jr.....119 Kercheval, Grosse Pte.
Blaine, Max.....654 Maccabees Bldg., Detroit
Bleier, Alfred.....13015 E. Warren Ave., Detroit 13
Bleier, Joseph.....7504 Dexter Blvd., Detroit 6
Bloch, Abraham.....2935 E. Milwaukee, Detroit 11
Blodgett, James B.....606 Kales Bldg., Detroit 26
Blodgett, William E. (L).....602 Kales Bldg., Detroit 26
Blodgett, William H.....603 Kales Bldg., Detroit
Bloom, Arthur R.....1058 Maccabees Bldg., Detroit 2
Blumenthal, Franz L.....466 Fisher Bldg., Detroit 2
Boccaccio, John L.....16383 Harper, Detroit 13
Boccia, J. J.....15761 E. Warren, Detroit
Boddie, Arthur W.....2737 Chene, Detroit 7
Bogucki, C. J. (M).....36450 Mound Rd., Warren
Bogue, Robert E.....15819 Wyoming St., Detroit 21
Bogusz, Ladislaus.....Wayne Co. Gen. Hosp., Eloise
Bohn, Z. Stephen.....327 Professional Bldg., Detroit
Bohne, A. W.....Henry Ford Hosp., Detroit
Boileau, T. I.....7700 Russell, Detroit
Boland, J. R.....2229 E. Jefferson, Detroit
Bolstad, Donald S.....Henry Ford Hosp., Detroit 2
Bolton, Russell P., Jr.....19566 Grand River, Detroit
Bookmyer, R. H.....17198 Oak Drive, Detroit 21
Bookstein, Abraham M.....1475 Colton, Detroit 3
Borin, Maurice C.....6767 W. Outer Drive, Detroit 21
Bornstein, Sidney.....2033 Puritan, Detroit 3
Bott, Edmund T.....3152 Biddle St., Wyandotte
Botvinick, Isadore.....13701 W. 7 Mile Rd., Detroit 21
Boutrous, T. A.....15801 W. McNichols Rd., Detroit 25
Bovill, E. G.....17555 James Couzens Hwy., Detroit 35
Bower, Donald W.....1336 Southfield, Lincoln Park
Bower, F. T.....70 Keningston Blvd., Pleasant Ridge
Bowers, Leo J.....11200 E. McNichols Rd., Detroit 34
Boyd, John H.....2615 W. Jefferson, Trenton
Boyle, Albert J.....20825 Mack Ave., Detroit 30
Bracken, Andrew H.....13102 W. Warren Ave., Dearborn
Braden, Robert G.....2853 Biddle Ave., Wyandotte
Bradfield, Horace F.....510 E. Warren, Detroit
Bradley, George T.....1201 David Whitney Bldg., Detroit 26
Bradshaw, William H.....4715 St. Antoine, Detroit 1
Brady, Herbert A.....208 Reno Bldg., River Rouge 18
Braitman, Louis..1504 David Broderick Tower, Detroit 26
Braley, William N.....12897 Woodward Ave., Detroit 3
Bramigk, F. W.....509-11 Professional Bldg., Detroit 1
Brand, Benjamin.....4500 Wabash Ave., Detroit 8
Braun, Lionel.....516 Fox Theatre Bldg., Detroit 1
Braverman, Morris M...1222 Maccabees Bldg., Detroit 2
Brekke, Viola G.....2763 W. Eight Mile Rd., Detroit
Bremer, William M.....16237 Mack Ave., Detroit 24
Brengle, Dean R. (R).....1229 Washington, Wellington, Kansas
Brent, Morris S.....13503 Northlawn Ave., Detroit 4
Brey, Norman W.....1202 Maccabees Bldg., Detroit 2
Briegel, Walter A. (R)....681 Whitmore Rd., Detroit 3
Briggs, William J.....1202 Maccabees Bldg., Detroit 2
Brines, O. A.....1512 St. Antoine, Detroit
Bringard, Elmer L.....16901 James Couzens, Detroit 21
Brisbois, Harold J. A.....28400 Plymouth Rd., Livonia
Brisson, Joseph C. D.....9191 Whittier, Detroit 24
Bristol, William R.....6142 Bishop Rd., Detroit
Broadman, Sylvan A.....16401 Grand River, Detroit 27
Bromme, William.....10 Peterboro, Detroit 1
Bronson, W. W.....22128 Grand River, Detroit 19
Brooks, Charles W.....2033 E. Davison Ave., Detroit
Brooks, Clark D. (L).....113 Martin Place, Detroit 1
Brooks, Eugene M.....2400 Ewald Circle, Detroit 4
Brooks, Nathan.....1001 Kales Bldg., Detroit
Brosius, William L.....Harper Hosp., Detroit
Brough, Glen A.....1402 David Whitney Bldg., Detroit
Brown, A. G.....12065 Wyoming, Detroit
Brown, Audrey O.....742 Maccabees Bldg., Detroit
Brown, Carlton F.....1229 David Whitney Bldg., Detroit 26
Brown, Charles H.....3152 Biddle Ave., Wyandotte
Brown, Frances.....1940 Lincolnshire, Detroit
Brown, Gordon T.....13000 Hayes Ave., Detroit 5
Brown, Harvey F.....3714 W. McNichols Rd., Detroit 21
Brown, Henry S.....18101 James Couzens Hwy., Detroit 2
Brown, John R.....702 Maccabees Bldg., Detroit 2
Brown, Robert A.....3529 Jefferson, Ecorse
Brown, Samuel M.....6315 Ellsworth Ave., Detroit 21
Brown, Stanley H.....8544 W. McNichols Rd., Detroit 21
Brown, Thomas A.....5430 W. Warren Ave., Detroit
Brownell, Paul G.....18916 Woodward Ave., Detroit 3
Bruder, Robert C.....Highland Park Gen. Hosp., Highland Park
Brudo, Philip A.....10 Peterboro, Detroit
Bruehl, Richard A.....471 Fisher Bldg., Detroit
Bruer, E. L.....1495 Fort St., Wyandotte
Bruer, Edgar S.....3529 W. Jefferson, Ecorse 29
Brunke, Bruno B.....7765 Mack Ave., Detroit 14
Brush, Brock Edwin.....2799 W. Grand Blvd., Detroit
Bryan, Donald I...13700 Woodward Ave., Highland Park
Bryce, John D.....5400 Trumbull, Detroit 2
Buchanan, W. P.....11751 Grand River Ave., Detroit 4
Budson, Daniel.....10300 W. Seven Mile Rd., Detroit 21
Buell, John H.....901 David Whitney Bldg., Detroit 26
Buerki, Robin C.....Henry Ford Hosp., Detroit
Buller, H. L.....4120 Fenkell Ave., Detroit 21
Burke, Ralph M.....742 Maccabees Bldg., Detroit 2
Burnham, D. C.....13700 Woodward Ave., Highland Park
Burns, Robert T.....16101 Harper Ave., Detroit 24
Burnstine, Julius Y.....45 Owen Ave., Detroit

Burnstine, Perry P.....434 W. Palmer, Detroit 2
Burr, George C.....1706 David Whitney Bldg., Detroit 26
Burr, H. Leonard.....168 Fisher Rd., Grosse Pointe
Burroughs, R. G.....1449 David Whitney Bldg., Detroit
Burrows, Howard A.....10423 W. Warren, Dearborn
Burstein, Harry S.....2950 W. Grand Blvd., Detroit 2
Burstein, I. Marvin.....2950 W. Grand Blvd., Detroit 2
Burstein, Morris M.....2950 W. Grand Blvd., Detroit 2
Burton, D. T.....54 Arden Park, Detroit
Burton, Irving F.....14624 East 7 Mile Rd., Detroit
Bush, Glendon J.....7704 Dexter Blvd., Detroit 6
Bush, Lowell M.....18950 Woodward, Detroit
Butler, Harry J. (L).....33 Waverly, Highland Park 3
Butler, John D.....1308 Broadway, Detroit 26
Butler, J. Payne.....3403 W. Warren, Detroit 8
Butler, Lawrence H.....7005 Harper Ave., Detroit
Butler, Volney N.....28 W. Adams, Detroit 26
Butterworth, Herman K...719 Liberty Ave., Lincoln Park
Buttrum, Edward J.....14755 Fenkell, Detroit 27
Byers, Dudley W.....8934 Oakland Ave., Detroit

Cadieux, Henry W. (L)....103 E. Grand Blvd., Detroit 7
Cahalan, Joseph L.....214 David Whitney Bldg., Detroit
Cain, Waldo L. (M).....8033 Twelfth St., Detroit 6
Caldwell, J. E.....10 Peterboro, Detroit 1
Caldwell, George L.....12017 Jos. Campau, Detroit 2
Cale, Edward E., Jr.....Henry Ford Hosp., Detroit 2
Calkins, H. N.....14970 Robson Ave., Detroit
Callaghan, Thomas T.....312 Professional Bldg., Detroit
Cameron, A. H.....2853 Biddle, Wyandotte
Cameron, D. A.....1405 Kales Bldg., Detroit
Campau, G. H.....393 W. Grand Blvd., Detroit
Campbell, Charles A.....12922 West Warren, Dearborn
Campbell, Duncan.....9203 Grand River, Detroit 4
Campbell, Duncan A. (E).....
1613 David Whitney Bldg., Detroit 26
Campbell, Kenneth N.....Blaine Hosp., Detroit
Campbell, M.D.....10 Peterboro, Detroit
Campbell, Thelma Wygant.....22375 Garrison, Dearborn
Candler, C. L...20040 Mack Ave., Grosse Pte. Woods 30
Canter, Allie L.....13700 Woodward Ave., Detroit
Canter, G. E.....13732 Woodward Ave., Detroit
Cantor, Meyer O.....666 Maccabees Bldg., Detroit
Cantow, L. A.....1123 David Whitney Bldg., Detroit 26
Capano, Oreste A.....16401 Grand River Detroit 27
Caputo, Joseph M.....22575 Nona Ave. Dearborn
Capuzzi, Eugene T.....19214 Votrobeck, Detroit 19
Caraway, J. E.....355519 Norris St., Wayne
Carbone, Louis A.....9317 Gratiot, Detroit 13
Carey, Cornelius, .(L).....9667 Gratiot Ave., Detroit 13
Carlisle, J. C.....2900 S. Fort, Detroit
Carlson, Harold W.....18070 Wildemere, Detroit 21
Carmichael, Edward K.....7815 E. Jefferson, Detroit 14
Carp, Joseph.....8839 Mt. Elliott, Detroit 11
Carpenter, Claire H.....18700 Meyer Rd., Detroit 21
Carpenter, C. J.....3835 Biddle St., Wayne
Carpenter, G. B.....1416 David Whitney Bldg., Detroit 26
Carpenter W. S.....1317 David Whitney Bldg., Detroit 26
Carr, J. G.....14111 Korte, Detroit
Carroll, Elmer H.....9920 Stoepel Ave., Detroit 4
Carroll, Lona B.....1066 Maccabees Bldg., Detroit 2
Carrick, Lee.....1515 Kales Bldg., Detroit 26
Carson, Herman J.....7745 Puritan, Detroit 21
Carstens, H. R.....3706 Manor Rd., Chevy Chase 15, Md.
Carter, John M.....613 David Whitney Bldg., Detroit 26
Carter, L. F.....613 David Whitney Bldg., Detroit 26
Casey, Byron L., Jr.....1865 Guardian Bldg., Detroit
Cashen, Russell M. (A).....Henry Ford Hosp., Detroit 2
Cassidy, W. J.....1737 David Whitney Bldg., Detroit 26
Castle, M. E. (M).....761 Fisher Bldg., Detroit 2
Castrop, Charles W.....10149 Michigan Ave., Dearborn
Catherwood, A. E...1337 David Whitney Bldg., Detroit 26
Caton, Dorothy F.....17144 Oak Drive, Detroit 21
Caughey, A. F., Jr.....16889 James Couzens, Detroit 35
Caughey, Edgar H.....11301 Whittier, Detroit 24
Caumartin, F. E.....15801 W. McNichols Rd., Detroit 35
Cellar, Frank A.....944 Maccabees Bldg., Detroit
Ceravolo, Albert J.....1420 St. Antoine, Detroit 26
Ceresko, A. R.....18650 W. Warren, Detroit
Cetlinski, C. A.....11838 Joseph Campau, Hamtramck
Cetnar, E. J. (M).....6684 Baldwin, Detroit 13
Chabut, V. George.....206 W. Dunlap, Northville
Chalk, Carl C.....418 Hillcrest, Grosse Pointe Farms
Chall, Henry G.....2941 W. McNichols, Detroit 21
Chapin, Sidney E.....10149 Michigan Ave., Dearborn
Chapman, Aaron L.....2550 Atkinson, Detroit 6
Chapman, Paul T.....1151 Taylor Ave., Detroit 2
Chapnick, H. A.....506 Kales Bldg., Detroit
Charleston, R. A.....15174 Lasher Rd., Detroit 23
Charnas, Sidney.....542 Maccabees Bldg., Detroit 2
Chase, Clyde H.....1002 David Whitney Bldg., Detroit 26
Chason, Jacob L.....1512 St. Antoine, Detroit 26
Chatel, Arthur N.....5015 Harding, Detroit 13
Check, Frank E.....3439 Iroquois, Detroit 14
Cheng, James T.....1800 Tuxedo, Detroit 26
Cherup, Nicholas.....11838 Joseph Campau, Hamtramck
Chesluk, H. M.....1312 David Broderick Tower, Detroit
Chester, William P.....5057 Woodward, Detroit 2
Childs, George M.....6505 Hamilton, Detroit 2
Chipman, Willard A...14920 Grd. River Ave., Detroit 27
Chittenden, George E...7815 E. Jefferson Ave., Detroit 14
Chostner, G. C.....13715 Gratiot Ave., Detroit
Christensen, C. A.....10149 Michigan Ave., Dearborn
Christopher, James G.....4777 East Outer Drive, Detroit
Chrouch, Laurence A.....18456 Grand River, Detroit 23
Church, A. S.....10 Peterboro, Detroit
Cioffari, M. S.....19363 James Couzens Hwy., Detroit
Ciprian, Joseph E.....1775 E. Grand Blvd., Detroit
Clapper, Muir.....1512 St. Antoine, Detroit
Clark, Arthur M.....22400 Cherryhill, Dearborn
Clark, B. W. (M).....Address Unknown
Clark, Charles J.....Ford Motor Co., Dearborn
Clark, Clarence M.....2605 Holbrook, Detroit 12
Clark, Donald V.....15400 Plymouth Rd., Detroit 27
Clark, Harry G.....14600 Greenfield, Detroit 27
Clark, Harold E.....17198 Oak Drive, Detroit 21
Clark, William P.....1682 S. Fort St., Lincoln Park
Clarke, Charles N.....2501 W. Grand Blvd., Detroit
Clarke, Norman E.....2501 W. Grand Blvd., Detroit 8
Clarke, Robert B.....1112 Kales Bldg., Detroit
Clifford, C. H.....10 Peterboro, Detroit 1
Clifford, J. E.....910 David Broderick Tower, Detroit 26
Clifford, R. H.....Henry Ford Hospital, Detroit
Clifford, T. P.....1802 David Whitney Bldg., Detroit 26
Clippert, J. C. (E).....Dearborn Inn, Dearborn
Coan, Glenn L.....114 Maple, Wyandotte
Coates, Carl Amos.....105 E. Chicago, Quincy
Cobane, John H.....10 Peterboro, Detroit 1
Cochrane, Edgar G.....12805 Hamilton, Detroit 3
Cohen, H. Herbert.....12700 W. 7 Mile Rd., Detroit 21
Cohen, Lewis.....1404 David Broderick Tower, Detroit
Cohn, Daniel E.....409 Fox Bldg., Detroit 1
Cohoe, Don A.....18916 Woodward, Detroit 3
Cole, Albert B.....2208 David Broderick Tower, Detroit
Cole, F. H.....1757 David Whitney Bldg., Detroit 26
Cole, James E.....344 Glendale, Detroit 4
Cole, Wyman C. C.....1077 Fisher Bldg., Detroit 2
Coleman, Margarete W.....58 W. Adams Ave., Detroit
Coleman, William G.....20526 Grand River, Redford 19
Collings, M. R.....9201 W. Outer Dr., Detroit 19
Collins, James D. (A).....12845 Broadstreet, Detroit 4
Collins, James E.....13103 W. Chicago Blvd., Detroit 4
Colvin, Leslie T.....474 Fisher Bldg., Detroit 2
Colyer, Raymond G.....56 Rhode Island, Detroit 3
Comfort, Milton D.....28754 Seneca, Flat Rock
Comstock, Lawrence A.....P. O. Drawer L, Trenton
Condon, Stanley.....1477 Lochmoore Blvd.,
Grosse Pointe Woods
Conley, L. C. M.....99 Tuxedo, Detroit 3
Connelly, R. C.....1645 David Whitney Bldg., Detroit 26
Conner, Edward D.....15778 Birwood, Detroit
Connolly, Frank O.....5149 Joy Rd., Detroit 4
Connolly, John P.....5149 Joy Rd., Detroit 4
Connolly, Paul J.....113 Martin Place, Detroit
Connors, J. J.....3546 Trumbull, Detroit

Cook, James A.....1860 Ford at 19th, Wyandotte
Cook, James C.....Harper Hosp., Detroit 1
Cooksey, Warren B.....62 W. Kirby, Detroit
Cooper, Benjamin F.....10053 Gratiot St., Detroit 13
Cooper, Edmond L.....414 David Whitney Bldg., Detroit
Cooper, James B...1241 David Whitney Bldg., Detroit 26
Cooper, R. R.....1515 David Whitney Bldg., Detroit 26
Corbeille, Catherine.....1050 Fisher Bldg., Detroit
Coseglia, Robert P.....7962 Kercheval, Detroit 14
Costello, Russell T.....630 Fisher Bldg., Detroit 2
Cotant, John F.....8935 Fenkell, Detroit 21
Cotruro, Louis D.....3640 McDougall, Detroit 7
Cotton, S. O.....2332 Corson Ave., Detroit
Coulter, William J.....5258 Chatsworth, Detroit 24
Courville, Charles J.....1202 Maccabees Bldg., Detroit 6
Cowan, Wilfrid.....6135 Chalmers, Detroit 13
Cowen, Leon B.....1038 Maccabees Bldg., Detroit 2
Cowen, Robert L.....907 Mutual Bldg., Detroit 26
Coyle, J. E.....573 Fisher Bldg., Detroit
Coyne, Douglas Ruthven.....7376 Grand River, Detroit 4
Crews, Thomas H.....772 Fisher Bldg., Detroit 2
Croll, Leo J.....1326 Maccabees Bldg., Detroit 2
Croll, Maurice M.....1326 Maccabees Bldg., Detroit 2
Crook, Charles L.....60 Colorado, Highland Park 3
Cross, Harold E.....
499 Sunningdale, Grosse Pointe Woods 30
Crossen, Henry F.....902 David Whitney Bldg., Detroit 26
Crossen, Robert J...902 David Whitney Bldg., Detroit 26
Croushore, James E.....573 Fisher Bldg., Detroit 2
Cruikshank, Alexander (E).....
228 E. Grand Blvd., Detroit 7
Curhan, Jos. Howard.....18709 Meyer Rd., Detroit 21
Curtis, Frank E.....10 Peterboro, Detroit 1
Curtiss, William P.....3181 E. Jefferson, Detroit 9
Cushing, Russell G.....13424 Gratiot Ave., Detroit 5
Cusick, Paul L.....1108 Mutual Bldg., Detroit 26
Czuj, J. M.....17555 James Couzens, Detroit

Dale, Edward C., Jr.....28 W. Adams Ave., Detroit 26
Dale, Esther H.....1512 St. Antoine, Detroit 26
Dale, Mark.....3340 E. Eight Mile Rd., Detroit 34
Daly, Byrne M.....120 McLean, Detroit 3
Danforth, J. C., Jr...20175 Mack Ave., Grosse Pte. Woods
Danforth, J. C.....20175 Mack Ave., Grosse Pointe Woods
Danforth, M. E. (E).....1311 Cadillac Blvd., Detroit 14
Daniels, L. E.....460 Fisher Bldg., Detroit
Darling, Charles E.....673 Fisher Bldg., Detroit
Darling, Milton A.....673 Fisher Bldg., Detroit 4
Darpin, Peter H. Y.....6602 W. Fort St., Detroit 9
Davidson, David M.....1055 Fisher Bldg., Detroit 2
Davidson, Harry O.....Henry Ford Hosp., Detroit
Davies, T. S.....15425 Kercheval, Grosse Pointe
Davies, Windsor S.....1302 Mutual Bldg., Detroit 26
Davis, G. H. (M)....2252 Wash. Ave., Silver Spring, Md.
Davison, L. E. (M).....305 Boulevard, Anderson, S. C.
Dawson, W. A.....25951 Avondale Rd., Inkster
Day, Andrew J.....710 David Whitney Bldg., Detroit
Day, J. Claude.....307 David Whitney Bldg., Detroit
Dean, C. Robert.....8811 Hamilton Ave., Detroit 2
Deering, Robert J.....1392 Coolidge Hwy., River Rouge
Defever, Cyril R.....15124 Kercheval, Grosse Pointe
Defnet, William A.....1309 Mutual Bldg., Detroit 26
DeJongh, Edwin..Diesel Eng. Div., General Motors Corp.,
13400 W. Outer Drive, Detroit 23
Delaini, Stella M.....760 Fisher Bldg., Detroit 2
Delaney, James R...1020 David Whitney Bldg., Detroit 26
DeLawrence, Betty J.....10149 Michigan, Dearborn
DeLawrence, Thomas.....10149 Michigan, Dearborn
Demaray, John F.....15312 Burt Rd., Detroit 23
DeNike, A. James (L)....1479 E. Jefferson Ave., Detroit 7
Denison, Louis L.....4026 W. McNichols Rd., Detroit 21
Dennis, M. S.....935 S. Military Ave., Dearborn
DePonio, Sylvester A.....20249 Van Dyke, Detroit 12
Deresz, Alphonse R.....19444 Van Dyke, Detroit
Derleth, Paul E.....562 W. Oakridge, Ferndale
DeRosier, J. L.....10944 Wilshire, Detroit
Derr, J. W.....702 Maccabees Bldg., Detroit
DeSmyter, George C.....15527 E. Warren, Detroit
de-Spelder, Ray E.....2970 W. Grand Blvd., Detroit 11
Deuby, Owen J.....15105 W. Seven Mile Rd., Detroit 35
Deur, Julius J.....2201 E. Jefferson, Detroit 7
Devine, Herbert W.....22101 Moross Rd., Detroit 24
Dibble, Harry F.....1313 David Whitney Bldg., Detroit 26
Dickson, B. R.....337 W. Grand Blvd., Detroit 16
Dickson, Elias L., Jr.....7640 Oakland, Detroit 11
Dickson, Leon A.....5119 Milford, Detroit
Diebel, Nelson W.....660 Cadieux, Detroit 30
Dietzel, H. O.....1024 W. Seven Mile Rd., Detroit
Dill, Hugh L.....16114 E. Warren, Detroit 24
Dill, J. Lewis.....2799 W. Grand Blvd., Detroit 2
Di-Loreto, Panfilo C.....4345 Harvard Rd., Detroit
Dimond, George E.....861 Monroe Blvd., Dearborn
Dinnen, W. J., Jr. (A).....19516 Pierson, Detroit 19
Dittmer, Edwin F.....
18412 Mack Ave., Grosse Pointe Farms 30
Dixon, F. W.....530 N. Telegraph Rd., Dearborn
Dixon, R. K.....2501 W. Grand Blvd., Detroit
Dixon, Ray S.....5001 Van Dyke Ave., Detroit 13
Dobkin, Joseph.....7745 Puritan Ave., Detroit 21
Dodds, J. C. (L)....1355 David Whitney Bldg., Detroit 26
Dodenhoff, Chas. F.....791 E. Grand Blvd., Detroit 7
Dodrill, F. D.....1553 Woodward, Detroit
Doering, Wendell R.....968 Fisher Bldg., Detroit 2
Doerr, Louis E., Jr.....16401 Grand River, Detroit 27
Dolega, Stanley F.....12870 E. Jefferson, Detroit 14
Dolgoff, Sidney.....7301 Schaefer, Dearborn
Dolman, E. N. (A).....8228 Dexter, Detroit 6
Domzalski, Casimer A.....5361 McDougall, Detroit 11
Donald, Douglas.....7815 E. Jefferson, Detroit 7
Donelson, Kater.....27371 Michigan Ave., Inkster
Donovan, Daniel R., Jr.....8378 Grand River, Detroit 4
Donovan, Eugene T.....13365 Michigan, Dearborn
Donovan, Richard S.....968 Fisher Bldg., Detroit 2
Dorman, Jack.....18245 Warrington Dr., Detroit
Dorsey, John M.....65 Moss Street, Highland Park 3
Doty, C. A. (L)....1735 David Whitney Bldg., Detroit 26
Doub, Howard P.....Henry Ford Hosp., Detroit
Douglas, Clair L.....405 David Whitney Bldg., Detroit
Dovitz, Benj. W.....95 Martin Place, Detroit
Dowdle, Edward F.....2501 W. Grand Blvd., Detroit 8
Downer, Ira G.....8445 E. Jefferson Ave., Detroit
Downes, George O.....8007 Harper, Detroit 13
Doyle, George H.....5543 W. Warren, Detroit 10
Drake, Ellet H.....Henry Ford Hospital, Detroit 2
Drake, J. J. (R).....
4321 E. Delmar Drive, Ft. Lauderdale, Fla.
Dranginis, Edward J.....850 No. Rademcher, Detroit 9
Draves, Edward F.....19647 Joy Rd., Detroit 28
Drazek, Joseph A.....18254 Livernois, Detroit 21
Drews, Robert S.....12500 Broadstreet, Detroit 4
Drinkhaus, H. I. (M).....14827 E. Jefferson, Detroit 15
Droock, Victor.....10 Peterboro, Detroit 1
Dubin, Joseph J.....10401 W. Chicago Blvd., Detroit 4
Dubnove, Aaron.....2115 W. Grand Blvd., Detroit 8
Dubois, Paul W...1708 David Broderick Tower, Detroit 26
Dubpernell, Karl (E).....3525 28th St., Detroit 10
Dubpernell, Martin S.....4019 Gilbert, Detroit 10
Dubpernell, Robert O.....9125 Meyers Rd., Detroit 28
Dudek, J. J.....16401 Grand River, Detroit 27
Dumke, P. R.....Henry Ford Hosp., Detroit
Duncan, James R.....8633 John R, Detroit 1
Dundas, Edward M.....4700 Schlaff, Dearborn
Dunlap, Henry A.....7815 E. Jefferson Ave., Detroit 14
Dunlap, Samson F.....9100 Oakland, Detroit
Dunn, Cornelius E.....11107 Mack Ave., Detroit
Durham, Everett W.....904 S. Military, Dearborn
Durocher, Edmund J. (L).....4158 W. Jefferson, Ecorse
Dutcher, Dwight J.....21742 Elkhart, Detroit 36
Duwe, Frank A.....25296 Fenkell, Detroit
Dwaihy, Paul J.....14530 E. Warren, Detroit
Dwyer, Francis W.....7448 Linwood, Detroit
Dziuba, John F.....8559 W. Jefferson, Detroit 17

Eades, Charles C.....863 Fisher Bldg., Detroit 2
Eadie, G. A.....28400 Plymouth, Livonia
Eakins, F. J.....Veterans Adm., Guardian Bldg., Dearborn
Easterly, Robert L.....9 Salliotte Rd., Ecorse
Eaton, Crosby D.....462 Fisher Bldg., Detroit 2

Eckhous, Arthur W.....1015 Kales Bldg., Detroit
Eder, Samuel J.....1116 Maccabees Bldg., Detroit 2
Edgar, Irving I.....712 Maccabees Bldg., Detroit 2
Edmonds, Gerald W.....44200 W. 10 Mile Rd., Northville
Edmonds, W. N.....10 Peterboro, Detroit 1
Edmondson, Robert B.....18501 Mack Ave., Detroit 24
Edwards, Gilbert Lloyd.....1841 E. Davison, Detroit 3
Eisman, C. H.....16841 Crawford Lane, Grosse Pointe
Eldredge, Edward F.....412 Kales Bldg., Detroit
Ellias, Elmer P.....4330 Fullerton, Detroit 6
Elliott, William G.....4101 Fenkell, Detroit 21
Elman, Meyer J.....14002 Woodward, Detroit
Elvidge, Robert J.....2900 W. Grand Blvd., Detroit
Emmert, Herman C. (L).....7303 Grandmont, Detroit 10
Engel, E. H.....114 Maple St., Wyandotte
English, L. V., Jr. (M).....8951 LaSalle, Detroit 6
Eno, Laurel S.....1001 David Whitney Bldg., Detroit 26
Ensign, Dwight C.....Henry Ford Hospital, Detroit
Ensing, Osborn H. B.....758 Fisher Bldg., Detroit 2
Epperson, John W. W.....4209 Harvard Rd., Detroit 24
Epstein, S. G.....6438 Van Dyke, Detroit 13
Erickson, Eldon W.....2900 S. Fort St., Detroit 26
Erkfitz, A. W.....545 David Whitney Bldg., Detroit
Erman, J. M.....9225 Grand River Ave., Detroit
Eschbach, J. W.....936 S. Military, Dearborn
Estabrook, Bert U. (L).....850 Virginia Park, Detroit 2
Ettinger, Clayton J. (L).....18734 Woodward, Detroit 3
Evans, Jos. M.....10500 E. Warren Ave., Detroit 13
Evans, Leland S.....20953 Grand River, Redford 19
Evans, W. A., Jr.....552 Fisher Bldg., Detroit 2
Evison, E. O. S. (M).....
1003 Hawthorne Rd., Grosse Pointe Woods 30
Ewing, C. H.....17120 E. Warren, Detroit 24
Eyres, A. E.....567 Fisher Bldg., Detroit

Fagin, I. Donald.....18254 Livernois, Detroit 21
Falick, Mordecai Louis.....960 Fisher Bldg., Detroit
Falk, Ira E.....7925 W. Vernor Hwy., Detroit 9
Fallis, Lawrence S.....Henry Ford Hosp., Detroit 2
Fandrich, Theodore S.....81 Kercheval, Detroit 30
Farbman, Aaron A.....14515 Kercheval, Detroit 15
Farbman, Simon S.....13300 Fenkell, Detroit 27
Faunce, Sherman P.....8300 Kercheval, Detroit 14
Feicks, William J. (M).....200 Ninth St., Lorain, Ohio
Felcyn, W. George.....2091 W. Grand Blvd., Detroit 8
Feld, David.....520 Maccabees Bldg., Detroit
Feldkamp, Lee E.....9545 Grand River, Detroit
Feldman, N. L.....17338 Woodingham, Detroit
Feldman, Paul H.....954 Maccabees Bldg., Detroit 2
Feldstein, Martin Z.....907 Kales Bldg., Detroit 26
Fellers, Ray L.....6505 Grand River, Detroit 8
Fenech, Harold B.....324 Professional Bldg., Detroit
Fenner, William G.....12454 E. Outer Drive, Detroit 24
Fenton, Edwin H.....15125 Grand River Ave., Detroit 27
Fenton, Meryl M.....8830 W. McNichols Rd., Detroit
Fenton, Russell F.....15125 Grand River Ave., Detroit 27
Fenton, Stanley C.....15310 E. Warren St., Detroit 24
Ferrara, Louis V.....13805 Parkgrove Ave., Detroit 5
Ferrara, Virginia M.....18422 Woodward Ave., Detroit 3
Ferrell, Robert D.....20936 Grand River Ave., Detroit 19
Ferris, G. N. (M).....15400 Plymouth, Detroit
Fettig, Carl A. (E).....6154 W. Fort St., Detroit 9
Figiel, Leo S.....5133 St. Lawrence, Detroit 10
Figiel, Steven J. (M).....Grace Hospital, Detroit 1
Fill, Leon.....1506 David Broderick Tower, Detroit
Finch, Alvis D.....17555 James Couzens, Detroit
Finch, F. Sinclair.....21303 Gratiot, East Detroit
Fine, Edward.....1112 Kales Bldg., Detroit 26
Finkell, Lawrence J.....15231 W. 7 Mile Rd., Detroit 3
Finkelstein, M. B.....17300 Schaefer Rd., Detroit 35
Fischer, Frederick J.....474 Fisher Bldg., Detroit 2
Fisher, George S...1310 David Broderick Tower, Detroit 26
Fisher, James M.....79 Kercheval, Grosse Pointe
Fisher, O. O. (L).....2475 Iroquois Ave., Detroit 14
Fisher, Ralph L.....8445 E. Jefferson, Detroit
Fitzgerald, James M.....2536 W. Grand Blvd., Detroit 8
Flaherty, H. J.....15865 Wyoming, Detroit 21
Flaherty, Norman W.....10573 W. Jefferson, River Rouge
Fleming, Joseph L.....Henry Ford Hospital, Detroit 2
Flora, William Robert.....8100 E. Jefferson, Detroit 14
Flower, J. A.....14140 Puritan, Detroit 27
Fogt, Herbert E.....7835 E. Forest, Detroit 13
Fogt, Robert G.....11801 Morang, Detroit
Folberg, I. I.....862 W. McNichols Rd., Detroit
Foley, Hugh S.....22255 W. Michigan, Dearborn 23
Foley, Joseph M.....1429 David Whitney Bldg., Detroit 26
Font, Anthony J.....710 Kales Bldg., Detroit 26
Ford, George A. (L).....803 Mutual Bldg., Detroit 26
Ford, Sylvester.....1010 Mutual Bldg., Detroit 26
Ford, Walter D. (E).....4866 Third Ave., Detroit 11
Fordell, F. S.....441 S. Oakwood, Lincoln Park 25
Forgrave, E. G.....14001 Greenfield, Detroit 21
Foster, E. Bruce.....853 Fisher Bldg., Detroit 2
Foster, Linus J.....10 Peterboro, Detroit 1
Foster, Owen C.....1015 David Whitney Bldg., Detroit 26
Foster, Wallace M.....13700 Woodward Ave., Detroit 3
Foster, William L.....2567 W. Grand Blvd., Detroit 8
Fowler, Melvin E.....247 E. Warren, Detroit
Fox, Leonard.....3152 Biddle St., Wyandotte
Fox, Morris Edward.....10 Peterboro, Detroit 1
Fraiberg, Paul L.....13001 W. Chicago, Detroit 27
France, C. J.....3401 Burns Ave., Detroit 14
Franjac, M. J.....25447 Plymouth Rd., Detroit 28
Franzen, Nils A.....19566 Grand River, Detroit 23
Frazer, Mary Margaret.....812 Kales Bldg., Detroit 26
Frederickson, G. C.....3919 John R, Detroit
Free, Harry W.....753 Fisher Bldg., Detroit 2
Freedman, John.....4853 2nd Blvd. at Warren, Detroit 1
Freedman, Milton.....18626 Santa Barbara, Detroit
Freeman, D. K.....881 Chalmers, Detroit 15
Freeman, Mable..1316 David Broderick Tower, Detroit 26
Freeman, M. W.....401 David Whitney Bldg., Detroit 26
Freeman, Wilmer.....940 E. Seven Mile Rd., Detroit 3
Freid, Samuel.....16850 Joy Rd., Detroit
Freier, Morton L.....1503 Kales Bldg., Detroit 26
Fremont, J. C.....1202 David Whitney Bldg., Detroit 26
Frey, James L. (M).....
U. S. Naval Hospital, Mare Island, Calif.
Friedlaender, A. S...10300 W. Seven Mile Rd., Detroit 21
Friedlaender, Sidney.....
10300 W. Seven Mile Rd., Detroit 21
Friedman, David.....2429 E. Milwaukee Ave., Detroit 11
Friedman, I. H.....3773 2nd Ave., Detroit 1
Fritz, G. E.....
St. John Hosp., 22101 Moross Rd., Detroit 21
Frothingham, G. E. (E)..707 D. Whitney Bldg., Detroit
Fryfogle, James D.....655 Fisher Bldg., Detroit 2
Fulgenzi, Andrew A.....7445 Mack Ave., Detroit
Fullenwider, Allan C.....22128 Grand River, Detroit 19
Fuller, Hugh M.....1257 David Whitney Bldg., Detroit 26
Fulton, W. J.....3-204 General Motors Bldg., Detroit 2

Gaber, Ben.....12244 Dexter, Detroit
Gagliardi, R. A. E.....2900 S. Fort, Detroit
Galantowicz, Henry C.....7433 Michigan, Detroit 10
Galdonyi, Laslo..2311 David Broderick Tower, Detroit 26
Galdonyi, Nicholas.....8001 W. Jefferson, Detroit 17
Galvin, P. P.....7416 Twelfth St., Detroit
Gannan, Arthur M.....4515 Trumbull, Detroit 8
Ganschow, John H.....1840 Holbrook, Detroit 12
Gardner, Lawrence Wm.....
18782 Glenwood Ave., Lathrup Village, Birmingham
Gardner, Max L.....812 Kales Bldg., Detroit
Gariepy, Louis B.....16401 Grand River Ave., Detroit 27
Gariepy, L. J.....16401 Grand River Ave., Detroit
Gass, H. Harvey.....815 Kales Bldg., Detroit
Gaston, Herbert B.....871 Fisher Bldg., Detroit 2
Gates, Nathaniel (L).....10 Peterboro, Detroit 1
Gaynor, Alex.....1326 E. Seven Mile Rd., Detroit 3
Gehring, Harold W.....767 Fisher Bldg., Detroit 2
Geib, Ledru O. (L).....3528 Van Dyke, Detroit 14
Geitz, William A.....7234 E. Forest Ave., Detroit 13
Gelbach, Philip D.....2900 S. Fort St., Detroit 25
Gellert, I. S. (L)....1229 David Whitney Bldg., Detroit 26
Gemeroy, J. C.....664 Fisher Bldg., Detroit 2
Gerisch, Robert A...1217 David Whitney Bldg., Detroit 26
Gerondale, E. J.....750 Fisher Bldg., Detroit 2
Gibson, Dumbar P.....8550 Oakland, Detroit 11

Giese, Douglas.....602 Doctors Bldg., Detroit
Giese, F. W.....18526 Schoolcraft, Detroit
Gigante, Nicola.....10 Peterboro, Detroit
Gigliotti, David.....Providence Hosp., Detroit
Gilbert, H. R.....13146 Phelps, Wyandotte
Gillespie, Stephen M.....1011 Haigh St., Dearborn
Gillman, R. W. (E).....61 Peterboro, Detroit 1
Gilpin, W. A.....4560 Niagara Lane, Rte. 1, Birmingham
Ginsberg, Harold I.....952 Maccabees Bldg., Detroit
Gitlin, Charles.....1610 Glendale St., Detroit 6
Gitlin, J. R.....6502 Chene, Detroit
Gittins, Perry C.....732 Maccabees Bldg., Detroit 2
Glasgow, Gordon K...1170 Harvard Rd., Grosse Pointe 30
Glassman, Samuel.....60 W. Hancock, Detroit 1
Glazer, Walter S.....17384 Ohio, Detroit 21
Gleason, John E. (L).....
17401 Pontchartrain Dr., Detroit 3
Glees, John L.....11631 Mack, Detroit
Glemet, Raymond B.....3314 Bagley, Detroit 16
Glowacki, B. F.....1144 Maccabees Bldg., Detroit 2
Goerke, Elmer A.....3663 Goddard Rd., Romulus
Goetz, Angus G.....710 David Whitney Bldg., Detroit 26
Goins, W. F.....6675 Tireman, Detroit 10
Goldberg, Arthur.....340 E. 8 Mile Rd., Detroit 3
Goldberg, Harry H.....514 Fox Theater Bldg., Detroit 1
Goldberg, Nathan H.....514 Fox Theater Bldg., Detroit 1
Goldin, M. I.....632 Maccabees Bldg., Detroit 2
Goldman, Abe A.....1013 Kales Bldg., Detroit
Goldman, Aubrey.....909 Kales Bldg., Detroit
Goldman, Perry.....1318 Maccabees Bldg., Detroit 2
Goldstein, Abe S.....16861 Wyoming Ave., Detroit 21
Goldstone, R. R.....10 Peterboro, Detroit 1
Gollman, Maurice D.....918 Maccabees Bldg., Detroit 2
Gonne, William S...619 David Whitney Bldg., Detroit 26
Goodman, H. L.....1512 St. Antoine, Detroit 26
Goodman, M. M.....9246 Grand River, Detroit
Goodwin, W. W.....41001 Seven Mile Rd., Northville
Gordon, John W. (R).....12700 Mendota, Detroit
Gordon, W. E., Jr.....14820 Rosemont, Detroit
Gordon, Wm. H.....1102 David Whitney Bldg., Detroit 26
Gore, Ira .....Mt. Sinai Hosp., Chicago, Ill.
Gorelick, Martin J.....23901 Michigan Ave., Dearborn
Gorning, Raymond P.....857 Marlborough, Detroit 15
Goryl, Stephen V.....9953 E. Forest, Detroit 13
Goss, S. B.....10 Peterboro, Detroit
Gostine, Edmond J.....
9758 Chalmer Ave. at Longview, Detroit
Gottschalk, Fred W.....1314 Maccabees Bldg., Detroit 2
Goudie, F. D.....18900 Sorrento Ave., Detroit
Gould, S. E.....Wayne Co. Gen'l Hosp., Eloise
Gourley, E. V.....16901 James Couzens, Detroit
Goux, Raymond S...545 David Whitney Bldg., Detroit 26
Grace, Joseph M.....17505 Parkside, Detroit
Graff, J. M.....7305 Joseph Campau, Detroit 11
Graham, J. A.....4102 Brush, Detroit 1
Graham, John G., Jr.....7815 E. Jefferson, Detroit 14
Grain, Gerald O.....Henry Ford Hosp., Detroit 2
Grajewski, Leo E.....2201 E. Jefferson Ave., Detroit 7
Gramley, William.....13328 E. Jefferson Ave., Detroit 15
Granger, Francis L.....14160 Gratiot Ave., Detroit 5
Granger, G. R.....705 David Whitney Bldg., Detroit 26
Grant, A. H.....18024 Sorrento, Detroit
Grant, H. E. (L).....Lewiston
Gratton, Henri L.....1301 Kales Bldg., Detroit 26
Gravelle, L. J.....1036 David Whitney Bldg., Detroit 26
Gray, J. P.....1415 Parker, Detroit 14
Greek, Louis M.....12901 Gratiot, Detroit 5
Green, Ellis R.....5172 Scotten Ave., Detroit 10
Green, Lewis.....13000 Grand River, Detroit 27
Green, Louis M.....14636 E. Seven Mile Rd., Detroit 5
Green, Nelson W.....15819 Wyoming, Detroit 21
Green, S. W.....2631 Woodward Ave., Suite 202, Detroit 1
Greenberg, Jack R.....15743 W. 7 Mile Rd., Detroit 19
Greenberg, J. J.....1211 David Broderick Tower, Detroit
Greenberg, M. Z.....9105 Van Dyke, Detroit
Greene, John B.....2730 Hastings St., Detroit 1
Greenidge, Robert I.....4839 Beaubien St., Detroit 1
Greenlee, William Tate.....15053 Maddelein, Detroit 5
Greenslit, Frank S.....Vet. Adm. Hosp., Dearborn
Greiner, Bert A.....13739 Gratiot, Detroit 5
Grekin, John N.....7441 W. 7 Mile Rd., Detroit 21
Greifenstein, F. E.....1512 St. Antoine, Detroit 26
Griffin, J. P.....17555 James Couzens Hwy., Detroit
Griffin, Robert J.....20227 Lancaster, Detroit 24
Griffith, A. J.....14049 Warwick Rd., Detroit
Griffiths, Sidney J.....15400 Plymouth Rd., Detroit 27
Grimaldi, G. J.....2983 Seminole, Detroit
Grinstein, Alexander..18700 Woodingham Dr., Detroit 21
Grob, Otto.....651 Fisher Bldg., Detroit 2
Gross, Louis.....18937 Van Dyke, Detroit
Grossman, S. C.....538 Maccabees Bldg., Detroit 2
Grotz, Genevieve A.....22148 W. Michigan Ave., Dearborn
Gudes, David S.....1080 Fisher Bldg., Detroit
Guerrero, Jose.....13535 Woodward, Detroit
Guimaraes, A. S.....7301 Shaefer Hwy., Dearborn
Guinan, G. E.....35551 Ford Rd., Wayne
Gulick, A. E.....1429 David Whitney Bldg., Detroit
Gurdjian, E. S.....840 David Whitney Bldg., Detroit 26
Gurskis, Eugenia.....504 Kales Bldg., Detroit
Gutow, Benjamin R.....602 Maccabees Bldg., Detroit
Gutterman, Meyer A.....1007 Kales Bldg., Detroit 26

Haefele, Leslie P.....29108 Ford Rd., Garden City
Hagge, D. R.....1201 David Whitney Bldg., Detroit
Haitinger, K. S.....7850 E. Jefferson, Detroit
Haking, Leonard.....9661 Gratiot, Detroit 13
Hale, A. S.....1501 David Whitney Bldg., Detroit
Hall, E. W.....10 Peterboro, Detroit 1
Hall, James A. J.....28 W. Adams St., Detroit 26
Hall, Ralph E.....10 Peterboro, Detroit 1
Hall, Robert J.....6014 W. Fort St., Detroit 9
Hall, Winthrop D.....6 Cherry Hill Ct., Dearborn
Hallen, Leonard J.....14001 Greenfield, Detroit
H'Amada, Norman K.....904 Maccabees Bldg., Detroit 2
Hamburger, A. C.....
1512 David Broderick Tower, Detroit 21
Hamil, Brenton M.....Henry Ford Hosp., Detroit
Hamilton, Norman C.....14555 Wyoming, Detroit 21
Hamilton, W. F. (L).....
58 W. Adams Ave., Suite 310, Detroit 26
Hamilton, William.....13836 Woodward Ave., Detroit 3
Hammer, Edwin J.....16616 Mack, Detroit 24
Hammer, Roy W.....16620 E. Warren, Detroit
Hammond, A. E...1863 David Whitney Bldg., Detroit 26
Hammond, J. L.....Gen. Del., Escondido, Calif.
Hand, Fordus V.....81 East Kirby, Detroit 2
Hansen, Frederick E.....16854 Baylis, Detroit
Hanser, Joshua (L).....2730 E. Jefferson, Detroit
Hardstaff, R. John.....
Suite 1202, 28 W. Adams Ave., Detroit 26
Harelik, E. W.....614 Maccabees Bldg., Detroit
Harkaway, Roman W.....19125 Van Dyke, Detroit 34
Harley, Garth H.....834 N. York, Dearborn
Harley, L. M.....4100 W. McNichols Rd., Detroit
Harm, Winfred B.....5884 West Vernor Hwy, Detroit 9
Harper, Jesse T.....1144 David Whitney Bldg., Detroit 26
Harrell, Voss.....806½ N. Oakwood Blvd., Dearborn
Harrington, Frank L.....8935 Fenkell, Detroit 21
Harris, Arthur D.....8943 Twelfth St., Detroit
Harris, Harold H.....8011 W. Vernor Hwy., Detroit
Harris, Ivor David..817 David Whitney Bldg., Detroit 26
Harrison, Wesley, Jr.....4847 Iroquois, Detroit 13
Harrison, W. L., Capt. (MC) (M).....
454 Harrison, Petersburg, Va.
Hart, Charles E.....9341 Moffat Ave., Detroit
Hart, John Clarence.....9341 Moffat, Detroit
Hartkop, Henry H.....16321 Mack Ave., Detroit 24
Hartman, F. W.....Henry Ford Hosp., Detroit 2
Hartquist, Robert J. (M)....224 North Drive, Wyandotte
Hartzell, John B.....7815 Jefferson Ave. E., Detroit 14
Hasley, Clyde K.....1429 David Whitney Bldg., Detroit 26
Hasley, Daniel E.....1516 St. Antoine St., Detroit 26
Hassig, W. W.....3631 McClellan, Detroit
Hastings, Orville J.....15132 Harper, Detroit 26
Hathaway, Hubert R.....Ford Motor Co., Dearborn
Hause, Glen E.....16401 Grand River, Detroit 27

Hauser, I. Jerome.....7411 Third Ave., Detroit 2
Hauser, John E.....671 Fisher Bldg., Detroit 2
Hauser, Maurice J.....7411 Third Ave., Detroit
Havers, Howard.....1032 Maccabees Bldg., Detroit 2
Hawkins, James W.....8527 Quincy Ave., Detroit 6
Hazen, Roy S.....20526 Grand River Ave., Detroit 23
Heath, Leonard P.....
1457 David Whitney Bldg., Detroit 26
Heavner, Lyle E.....119 Kercheval, Detroit
Hecht, Manes S.....773 Fisher Bldg., Detroit 2
Hedges, Frank W.....10363 Greensboro, Detroit 14
Heenan, T. H.....1409 David Whitney Bldg., Detroit 26
Heideman, Louis E.....12244 Dexter Blvd., Detroit
Heldt, Thomas J.....Henry Ford Hosp., Detroit 2
Hellems, H. K.....1512 St. Antoine, Detroit
Hendelman, Manuel H.....14350 Harper, Detroit 13
Henderson, A. B.....10452 Mack Ave., Detroit
Henderson, Allison B.....5320 John R., Detroit 2
Henderson, Charles W.....853 Fisher Bldg., Detroit
Henderson, Harold.....852 Fisher Bldg., Detroit 2
Henderson, H. W. (M).....109 Field Hosp.,
APO 541 USFA, c/o PM, New York, N. Y.
Henderson, John C.....504 Doctors Bldg., Detroit
Henderson, Leslie T.....13038 E. Jefferson, Detroit 15
Henderson, William E.....5349 VanDyke Ave., Detroit 13
Hendry, H. W.....2716 Rochester, Detroit
Henig, Fred N.....7605 W. Seven Mile Rd., Detroit 21
Henkin, Raymond (M).....3225 Collingswood, Detroit
Henrich, Lawrence E.....2501 W. Grand Blvd., Detroit 8
Herbst, Harold B.....17300 Schaefer Rd., Detroit 21
Herkimer, Dan R.....1802 Buckingham, Lincoln Park 25
Herrold, Rose E.....1277 E. Grand Blvd., Detroit
Herschelmann, Roy F.....
3343 Gratiot Ave. at Mack, Detroit 7
Hertzler, Jack H.....307 David Whitney Bldg., Detroit
Herwick, John T.....Henry Ford Hosp., Detroit 2
Hess, Murray W...13732 Woodward Ave., Highland Park
Hesselschwerdt, D. W.....3919 John R, Detroit 1
Hewitt, Leland V...917 David Whitney Bldg., Detroit 26
Hewitt, Marshall I.....Parke, Davis & Co., Detroit
Hewitt, Robert S.....2255 Fort St., Lincoln Park
Heyner, Stanley A.....3424 Oakman Blvd., Detroit 4
Hickey, Joseph.....6004 W. Fort St., Detroit 9
Hicks, Fred G.....7301 Schaefer Rd., Dearborn
Higbee, Arthur L.....429 E. Grand Blvd., Detroit 7
Hileman, S. Lee.....4043 W. Jefferson, Ecorse
Hill, E. J., Jr.....1536 David Whitney Bldg., Detroit 26
Hill, Gerald.....752 Book Bldg., Detroit
Hill, Welford T.....2405 Joseph Campau, Detroit
Hillenberg, Sidney J...20215 W. Seven Mile Rd., Detroit
Hillenbrand, Alfred E.....14321 Kercheval, Detroit 15
Hiller, Glenn I.....13700 Woodward Ave., Detroit 3
Hillier, Leland G.....13544 Woodward Ave., Detroit
Hilton, William E.....13902 Mack, Detroit 15
Hinko, Edward N.....18885 Haggerty Rd., Northville
Hiratzka, Tomiharu.....1512 St. Antoine, Detroit
Hirschfield, A. H.....829 Fisher Bldg., Detroit
Hirschman, L. J. (E)....2619 Munson Ave., Traverse City
Hirt, Harry.....Henry Ford Hosp., Detroit
Hoagland, Thomas V.....81 E. Kirby, Detroit
Hobbs, Donald V.....17357 Fenkell, Detroit
Hochman, Morton M.....16633 Plymouth Rd., Detroit 27
Hodges, Jason.....
1200 S. Oxford Rd., Grosse Pointe Woods 30
Hodgkinson, C. P.....Henry Ford Hosp., Detroit
Hoffer, Thomas.....6825 Allen Rd., Allen Park
Hoffman, Edward A.....7615 W. Vernor Hwy., Detroit
Hoffman, E. S.....766 Fisher Bldg., Detroit 2
Hoffman, Harry Y.....15085 E. Seven Mile Rd., Detroit 5
Hoffman, H. A.....10015 E. Outer Dr., Detroit
Hoffman, Martin H.....
1311 David Whitney Bldg., Detroit 2
Holcomb, August A.....117 W. Wing St., Northville
Holdredge, Jean M.....2514 Biddle, Wyandotte
Hollander, A. J.....8026 Michigan Ave., Detroit 10
Hollis, Henry B.....6809 Sarina, Detroit 10
Holmes, Alfred W.....8802 Michigan Ave., Detroit 10
Holt, Henry T. (A).....4888 Underwood, Detroit 4
Honhart, Fred L.....3240 Gratiot, Detroit 7
Honor, William H. (L).....2966 Biddle, Wyandotte
Hookey, John A.....2918 Biddle, Wyandotte
Hooper, Norman L.....6 Port Drive, Detroit
Hoops, George B. (E).....754 Fisher Bldg., Detroit
Hopkins, J. E.....6381 W. Fort St., Detroit 9
Horkins, Harold A.....893 Lakewood, Detroit
Horny, Hugo O.....11600 Whittier, Detroit 24
Horton, Reece H.....938 David Whitney Bldg., Detroit 26
Horvath, James J...1337 David Whitney Bldg., Detroit 26
Horvath, Louis O.....9122 W. Fort St., Detroit 9
Horwitz, J. B.....1208 David Broderick Tower, Detroit 26
Hotchkiss, Loris M.....33220 W. 7 Mile Rd., Livonia
Howard, Austin Z...825 David Whitney Bldg., Detroit 26
Howard, Philip J.....Henry Ford Hosp., Detroit 2
Howard, W. L.....Maybury San., Northville
Howell, Bert F.....10800 Whittier, Detroit 24
Howell, James T.....Henry Ford Hosp., Detroit 2
Howes, Homer A.....1515 David Whitney Bldg., Detroit
Howes, W. B.....1800 Tuxedo, Detroit 6
Howlett, Howard T.....868 Fisher Bldg., Detroit 2
Hromadko, Louis.....1075 Fisher Bldg., Detroit 26
Hubbard, John P., Jr.....1130 E. Grand River, Detroit 7
Hubbard, Ralph G.....14800 Prevost, Detroit 27
Hudson, J. Stewart..17443 E. Jefferson Ave., Grosse Pte.
Hudson, W. A.....602 David Whitney Bldg., Detroit
Huegli, Wilfred A.....16840 E. Warren, Detroit 24
Hull, LeRoy W.....1701 David Whitney Bldg., Detroit 26
Huminski, T. S.....19244 VanDyke, Detroit 34
Hummel, Arthur R.....8045 E. Jefferson, Detroit
Hunt, T. H.....19431 Van Dyke, Detroit 12
Hunt, Verne G.....723 David Whitney Bldg., Detroit 26
Hunter, B. H.....13341 Livernois, Detroit
Hunter, Elmer N.....7615 W. Vernor Hwy., Detroit 9
Hurd, Brooks H.....20187 Schaefer Rd., Detroit 21
Husband, Chas. W.....3810 Northwestern Ave., Detroit 6
Husband, R. C.....3810 Northwestern Ave., Detroit 6
Hyatt, Jarvis M.....22340 Michigan, Dearborn
Hyde, Frederick W.....6104 W. Vernor Hwy., Detroit 9
Hyde, Frederick W., Jr.....Grace Hosp., Detroit 1
Hyland, John R.....13030 Mack Ave., Detroit 15
Hyman, Samuel J.....27342 Michigan Ave., Inkster

Iacobell, Peter H.....19300 Van Dyke, Detroit 34
Igna, Eli J.....1109 Kales Bldg., Detroit
Ignatius, A. A.....1915 E. 9 Mile Rd., Ferndale
Irvin, Earle Albert.....1343 Buckingham Rd., Detroit 30
Irwin, William A.....Providence Hosp., Detroit 8
Isaacson, Arthur.....2921 E. Davison Ave., Detroit 12
Iseri, Lloyd T.....Wayne University, Detroit
Israel, B. B.....1424 Maccabees Bldg., Detroit
Israel, Joseph G.....870 Maccabees Bldg., Detroit 21
Iwata, Herbert T.....428 McKerchey Bldg., Detroit

Jacobson, Samuel D.....2435 Oakman Blvd., Detroit 4
Jaeger, Grove A.....1802 E. Grand Blvd., Detroit 11
Jaekel, C. N.....1086 E. Grand Blvd., Detroit 7
Jaffar, Donald J.....734 Maccabees Bldg., Detroit 2
Jaffe, J. L.....7465 Harper, Detroit 13
Jaffe, Jacob.....501 Fox Theater Bldg., Detroit 1
Jaffe, Louis.....1605 David Broderick Tower, Detroit 26
Jahsman, William E.....Henry Ford Hosp., Detroit 2
Jamieson, Thomas J.....1310 Warwick, Lincoln Park
Janicki, Natalia J.....Wayne Co. Gen. Hosp., Eloise
Jarre, Hans A.....Grace Hosp., Detroit
Jarsen, Frank J.....817 Beechmont, Dearborn
Jarvis, Harold F.....14110 Gratiot Ave., Detroit
Jasion, Lawrence J.....11945 Payton Ave., Detroit
Jaynes, Richard V.....25296 Fenkell, Detroit
Jeffries, Benjamin.....13615 Rutland, Detroit 27
Jend, W. J. (L).....3598 Mitchell, Detroit 7
Jenkins, Elwood A.....514 Kales Bldg., Detroit
Jennings, Charles G.....14827 E. Jefferson, Detroit 15
Jennings, Elmer R.....Alexander Blain Hosp., Detroit
Jentgen, Chas. J.....22101 Moross Rd., Detroit 24
Jeremias, Robert C.....13300 Livernois, Detroit 4
Jewell, F. C.....7220 Gratiot Ave., Detroit 13
Jocz, M. W.....945 Trombley Rd., Grosse Pointe Park
Jodar, E. O.....15760 Mack, Detroit 24

John, Hubert R.....650 Maccabees Bldg., Detroit 2
Johnson, Homer L.....Henry Ford Hosp., Detroit 2
Johnson, J. F. (M).....645 Mullet, Detroit
Johnson, Ralph A.....7815 E. Jefferson, Detroit 14
Johnson, Thomas D.....20526 Grand River, Detroit
Johnson, Vernon P.....10445 Kercheval, Detroit 14
Johnson, Vincent C.....10 Peterboro, Detroit
Johnson, W. H. M.....7159 Michigan, Detroit 10
Johnston, Charles G.....1512 St. Antoine, Detroit
Johnston, E. V.....3919 John R, Detroit
Johnston, Joseph A.....Henry Ford Hosp., Detroit
Johnston, William E.....1071 Fisher Bldg., Detroit 21
Johnstone, B. I.....555 Fisher Bldg., Detroit 2
Joinville, E. V.....1202 Mutual Bldg., Detroit 26
Jones, Adrian R.....15309 Mack Ave., Detroit 24
Jones, L. F.....1800 Tuxedo Ave., Detroit 6
Jones, Roy D.....15720 James Couzens Hwy., Detroit 21
Jones, W. J.....2514 Biddle, Wyandotte
Jordan, Prescott.....1209 Kales Bldg., Detroit
Jordan, R. G.....7759 Harper Ave., Detroit 13
Joyce, Stanley J.....1078 Fisher Bldg., Detroit 2
Juliar, Benjamin.....1328 Maccabees Bldg., Detroit 2
Jury, Donald B.....18800 Woodward, Detroit 3

Kalayjian, Bernard S.....Woman's Hosp., Detroit 1
Kalder, Ned Block.....6071 W. Outer Dr., Detroit 35
Kallet, Herbert I.....944 Maccabees Bldg., Detroit 2
Kallman, David.....5725 Cass, Detroit 2
Kallman, Leo.....5725 Cass, Detroit 2
Kallman, R. R.....2632 Woodward Ave., Detroit 1
Kamin, Louis E.....4642 Second Blvd., Detroit
Kaminski, Zeno L.....3504 24th St., Detroit 8
Kamperman, George A. (L).....
1807 David Whitney Bldg., Detroit 26
Kanter, Herman.....13127 W. 7 Mile Rd., Detroit 21
Kapetansky, A. J.....1728 Clairmont, Detroit 6
Kapetansky, N. J.....4790 W. Fort St., Detroit 9
Kaplita, Walter A.....5087 Caniff, Hamtramck 12
Karch, Saul.....26114 W. Six Mile Rd., Detroit
Kasabach, Harry Y.....1067 Fisher Bldg., Detroit
Kasabach, V. Y.....523 Book Tower Bldg., Detroit 26
Kasper, Joseph A.....Bon Secour Hosp., Grosse Pointe 30
Kaspor, Albert J.....16715 Harper Ave., Detroit
Kass, Arnold.....1316 David Stott Bldg., Detroit
Katzive, J. A.....7930 E. Jefferson, Detroit
Katzman, I. S.....412 Fox Theater Bldg., Detroit 1
Kaufman, Jack M.....1113 David Whitney Bldg., Detroit
Kaump, Donald H.....Providence Hosp., Detroit 8
Kauppinen, J. A.....15400 Plymouth Rd., Detroit
Kawecki, Lucian.....10734 Hart Ave., Huntington Woods
Kazdan, Louis L.....1027 David Stott Bldg., Detroit 26
Kazdan, Morris.....4619 Allen Road, Allen Park
Keane, W. E. (E)....1007 Harvard Rd., Grosse Pointe 30
Keating, Thomas F. (L).....20936 Grand River, Detroit
Kehoe, Henry J.....15252 Gratiot, Detroit 5
Keim, H. L.....1110 David Broderick Tower, Detroit 26
Keith, Kelly.....106 W. Davison, Detroit 3
Kelley, Frank James.....3919 John R. St., Detroit
Kelly, Edward W., Jr.....156 Harmon, Detroit 2
Kelmenson, Victor A.....7356 12th St., Detroit 6
Kelson, Malcolm J.....1045 Harvard, Grosse Pointe 30
Kemler, Walter J.....4045 W. Jefferson, Ecorse 18
Kennary, James M.....4900 Cadieux Rd., Detroit
Kennedy, Chas. S.....10 Peterboro, Detroit 1
Kennedy, D. J.....2730 E. Jefferson, Detroit
Kennedy, R. B...2108 David Broderick Tower, Detroit 26
Kenney, Leo J.....Henry Ford Hosp., Detroit
Kenning, John C. (A).....50 E. LaMar, Phoenix, Ariz.
Kennison, Warren S.....1103 Kales Bldg., Detroit
Kernkamp, Ralph F.....1204 D. Broderick Tower, Detroit
Kernick, M. O.....13700 Woodward Ave., Detroit
Kersten, Werner.....3100 Gratiot, Detroit 7
Kerzman, Joseph H.....850 Maccabees Bldg., Detroit 21
Keshishian, Sarkis K.....13544 Woodward Ave., Detroit 3
Keyes, Eugene Charles.....4840 Maple St., Dearborn
Keyes, John W.....Henry Ford Hosp., Detroit
Killins, C. G.....7850 E. Jefferson Ave., Detroit 14
Kimberlin, Kenneth K., Jr.....16101 Harper, Detroit 24
King, Edward D.....5455 W. Vernor Hwy., Detroit 9
King, Melbourne J.....5455 W. Vernor Hwy., Detroit 9
Kingsley, J. W., Jr.....2201 E. Jefferson, Detroit 7
Kingswood, Roy C.....90 E. Warren Ave., Detroit 1
Kingsley, George.....909 Kales Bldg., Detroit
Kirtland, William B.....2201 E. Jefferson, Detroit 7
Kitzmiller, John L.....15819 Wyoming Ave., Detroit 21
Klebba, Paul A.....161 Grixdale, Detroit 31
Klein, A. A.....13000 Grand River Ave., Detroit
Klein, Howard A.....1838 David Whitney Bldg., Detroit
Klein, Sander P.....1312 David Broderick Tower, Detroit
Klein, William.....2288 Webb, Detroit
Kleinman, Shmarya.....2909 W. Grand Blvd., Detroit
Kliger, David.....7756 Southfield, Detroit 10
Klosowski, Joseph.....8222 E. Outer Drive, Detroit
Knaggs, Charles W. (L).....12244 Gratiot, Detroit 5
Knaggs, Earl J.....3164 Biddle, Wyandotte
Knapp, Byron S.....10909 W. Jefferson, River Rouge 18
Knapp, Floyd B.....16565 Birwood, Detroit 21
Knapp, W. L. (M).....2331 Biddle Ave., Wyandotte
Knobloch, Edmund J.....5933 Chene, Detroit 11
Knoch, Hubert S.....14149 E. Jefferson, Detroit 15
Knox, Ross M.....9 Salliotte, Ecorse
Koebel, R. H.....14504 Mack Ave., Detroit 24
Koerber, Edward J.....4876 Lakeview Ave., Detroit 13
Kogut, C. S.....10627 Puritan, Detroit
Kokowicz, Raymond J...1056 Maccabees Bldg., Detroit 2
Kolasa, W. B.....1910 E. Grand Blvd., Detroit 11
Kopel, Joseph O.....10 Peterboro, Detroit 11
Koren, Louis.....1214 Griswold St., Rm. 610, Detroit 26
Korum, L. W.....18585 E. Warren, Detroit
Koschnitzke, Herman K.....2900 S. Fort, Detroit
Kossayda, Adam W.....5605 Michigan Ave., Detroit 10
Koster, Koert.....17725 Manderson Rd., Detroit 3
Kovach, Emery P.....14149 E. Jefferson, Detroit 15
Kovan, D. D.....16965 Hamilton, Highland Park
Kozlinski, Anthony E.....5359 Chene, Detroit 11
Kozlow, Louise E. Ange.....863 Fisher Bldg., Detroit 2
Krabbenhoft, Kenneth L.....Harper Hosp., Detroit 1
Kraft, Raymond B.....9300 Mack Ave., Detroit 14
Kraft, Ruth M.....972 Fisher Bldg., Detroit 2
Krass, Edward W.....11088 Gratiot Ave., Detroit 5
Kraus, John J.....16840 E. Warren, Detroit
Krebs, William T.....16419 E. Warren, Detroit 24
Kreinbring, George E.....4229 Mt. Elliott, Detroit 14
Kretzschmar, John C.....535 E. Grand Blvd., Detroit 7
Krevsky, David A.....2015 Fort St., Lincoln Park 25
Krieg, Earl G. M...1842 David Whitney Bldg., Detroit 26
Krieger, Harley L.....11390 Strathmore, Detroit 27
Kritchman, M. J.....
2314 David Broderick Tower, Detroit 26
Kroha, Lawrence A.....15124 Kercheval, Detroit 30
Krohn, Albert H.....5461 Second Ave., Detroit 2
Krynicki, Francis X.....1044 Maccabees Bldg., Detroit 2
Kubanek, Joseph L.....23134 Myrtle St., Dearborn
Kucmierz, Francis S.....12181 Joseph Campau, Detroit 12
Kuhn, Albert Arthur.....90 E. Warren, Detroit 1
Kuhn, Richard F.....1700 Junction, Detroit 9
Kulaski, Chester H.....9309 Joseph Campau, Detroit 12
Kullman, Harold J. F.....Vet. Adm. Hosp., Dearborn
Kurcz, Joseph A.....7433 Michigan, Detroit 10
Kurtz, Harry C.....833 Barrington, Grosse Pointe Park 30
Kurtz, I. J.....503 Fox Theatre Bldg., Detroit 1
Kurtz, Leonard D...2208 David Broderick Tower, Detroit
Kutsche, John D.....2057 W. Jefferson, Trenton
Kwasiborski, Stanley A.....2300 Oak St., Wyandotte
Kyprie, H. M.....414 Kales Bldg., Detroit

LaBerge, James M.....114 Maple St., Wyandotte
LaBine, Alfred C.....8-259 General Motors Bldg., Detroit
LaFerte, Alfred D...1401 David Whitney Bldg., Detroit 26
LaHood, M. J.....17555 James Couzens, Detroit 35
Lake, R. C.....10700 Balbour Rd., Detroit 24
Lakoff, Charles.....10234 W. 7 Mile Rd., Detroit 21
Lam, Conrad R.....Henry Ford Hosp., Detroit 2
Lamberson, Frank A.....19001 Grand River, Detroit 23
Lammy, James V.....644 Maccabees Bldg., Detroit 2
Lampman, H. H.....675 Fisher Bldg., Detroit 2
Landers, Maurice B., Sr.....
950 David Whitney Bldg., Detroit 26

Lang, E. F.....Harper Hosp., Detroit
Lang, Leonard W.....17400 Schaefer, Detroit 21
Lange, Anthony H.....364 E. Grand Blvd., Detroit 7
Lange, William A.....3919 John R, Detroit
Laning, George M...1217 David Whitney Bldg., Detroit 26
Lansky, Mandell.....14427 Mack Ave., Detroit
Lapham, F. E.....12583 Livernois, Detroit 4
Large, A. M.....10 Peterboro, Rm. 210, Detroit
Larned, Richard I.....14182 Gratiot, Detroit
Larsson, Bror H. (L).....3919 John R St., Detroit
Lasichak, Andrew G.....908 Kales Bldg., Detroit
Lasley, James Wm.....1026 Maccabees Bldg., Detroit 2
Lathrop, Philip L.....415 Book Bldg., Detroit 26
Latteier, K. K.....10 Peterboro, Detroit
Lauppe, E. H.....1650 David Whitney Bldg., Detroit 26
Lauppe, F. A.....1801 David Whitney Bldg., Detroit 26
Laurisin, Eugene.....5290 W. Chicago, Detroit
Lawson, John W.....18456 Grand River Ave., Detroit 23
Lazar, Morton R.....7401 Third Ave., Detroit 2
Leach, David.....865 Fisher Bldg., Detroit
Leacock, R. C.....10619 E. Jefferson, Detroit
Leader, Luther R...1129 David Whitney Bldg., Detroit 26
Leaver, L. Ross.....757 Lakewood, Detroit 15
Lebamoff, Alexander T. (M).....6586 Allen, Allen Park
Leckie, G. C.....1355 David Whitney Bldg., Detroit 26
Lecklider, A. F.....Fisher Body Division, Piquette and St. Antoine, Detroit
Lee, Harry E.....9247 Mack Ave., Detroit 14
LeGallee, G. M.....18520 W. 7 Mile Rd., Detroit 27
Leibinger, Henry R.....511 Barrington Rd., Grosse Pointe
Leight, Leonard.....3440 Ewald Circle, Detroit 4
Leipsitz, Louis S.....3566 Cass, Detroit 1
Leiser, Rudolf.....13700 Woodward Ave., Detroit 3
Leiter, Forrest C.....22375 W. Garrison, Dearborn
Leithauser, D. J.....14540 E. Warren, Detroit
Leland, Solomon.....6563 Grand River, Detroit 8
Lemley, Clark F.....553 Fisher Bldg., Detroit 2
Lemmer, J. A., Jr.....9300 Mack Ave., Detroit
Lemmon, C. E.....1337 David Whitney Bldg., Detroit 26
Lemon, Bruce K. (M).....716 Kales Bldg., Detroit
Lentine, James J.....3485 Audubon, Detroit
Lenz, Willard R.....418 Moran Rd., Grosse Pointe 30
Lepard, C. W.....1025 David Whitney Bldg., Detroit 26
Lepley, Fred O.....13302 Kercheval, Detroit 15
Lerman, S. E.....23700 Van Dyke, Van Dyke
Lerman, Samuel I.....4400 Livernois, Detroit
L'Esperance, Simon P. (R).....1344 Somerset, Detroit 30
Lessem, David.....19945 Prevost, Detroit
Leszynski, J. S.....517 Professional Bldg., Detroit 1
Leucutia, Traian.....10 Peterboro, Detroit
Levagood, Floyd B.....14056 Artesian, Detroit
Levant, Arthur B.....14828 E. Warren, Detroit
Levin, David M.....8819 Dexter Blvd., Detroit 6
Levin, Herbert G.....17300 Schaefer, Detroit
Levin, Michael M.....616 Maccabees Bldg., Detroit
Levin, Samuel J.....469 Fisher Bldg., Detroit 2
Levine, E. E.....Veterans Hosp., Dearborn
Levine, S. S.....8233 W. Chicago, Detroit
Levitt, Edward J.....840 Maccabees Bldg., Detroit 2
Levitt, Irving.....19214 Santa Barbara, Detroit
Levitt, Nathan.....607 Kales Bldg., Detroit
Levy, David B.....13003 Santa Clara, Detroit 35
Levy, Marvin B.....13906 Woodward, Detroit 3
Lewin, Harry.....2457 Woodward Ave., Detroit 1
Lewis, Charles T.....5050 Joy Rd., Detroit 4
Lewis, J. Hugh.....2956 Biddle, Wyandotte
Lewis, L. A.....2730 E. Jefferson, Detroit 7
Lewis, Wilfred John.....404 Professional Bldg., Detroit 1
Libbrecht, Robert V.....6540 Park, Allen Park
Lichter, M. L.....2900 Oakwood, Melvindale 25
Lichtwardt, Harry E.....413 Professional Bldg., Detroit
Lichtwardt, Hartman A.....432 E. Hancock Ave., Detroit
Liddicoat, A. G.....20125 Fenkell, Detroit 23
Lieberman, B. L.....19212 Woodward Ave., Detroit
Lightbody, James J...501 David Whitney Bldg., Detroit 26
Lignell, Rudolph W...16259 James Couzens Hwy., Detroit
Lilly, C. J.....2950 Puritan Ave., Detroit
Linkner, Leonard S.....738 Maccabees Bldg., Detroit 2
Linn, Herman J. (A).....23541 Hollander, Dearborn
Linton, James R.....Wayne County General Hosp., Eloise
Lipinski, Stanley L.....7540 Michigan Ave., Detroit 10
Lipkin, Ezra.....5715 Michigan Ave., Detroit 10
Lipnik, Morris J.....15101 W. 7 Mile Rd., Detroit 35
Lipschutz, Louis S.....4741 Fullerton Ave., Detroit 4
Lipson, Madeleine L.....7401 Third Ave., Detroit
Lipton, Raymond F.....10 Peterboro, Detroit 1
Litsky, Abraham D.....1183 E. Grand Blvd., Detroit 11
Little, James W.....Mt. Carmel Mercy Hosp., Detroit
Littlejohn, David.....Wayne County Bd. of Health, Eloise
Lockwood, Bruce C...723 David Whitney Bldg., Detroit 26
Lofstrom, James E.....1420 St. Antoine, Detroit 26
Long, Earle C.....2626 Rochester, Detroit 6
Long, John J.....12421 Monica, Detroit 4
Longo, Salvatore.....St. Mary's Hosp., Detroit
Longyear, Harold W.....3019 Woodward, Royal Oak
Lookanoff, V. A.....17145 Fairfield, Detroit
Loranger, C. B.....20825 Mack, Detroit
Loranger, Guy L.....250 Rayson St., Northville
Lorber, J. H.....16558 Northlawn Ave., Detroit 21
Lorentzen, Edwin H.....11702 Grand River, Detroit 4
Lovas, Wm. S.....7702 W. Fort St., Detroit 9
Love, W. Thomas.....231 E. Warren, Detroit 1
Lowe, Adolf W.....3338 W. Davison, Detroit
Lowe, Townsend G.....9430 Oakland, Detroit 11
Lowrie, William L., Jr.....Henry Ford Hosp., Detroit 2
Lowry, George L.....11601 E. Jefferson, Detroit 14
Lublin, Anna.....18412 Mack Avenue, Detroit 24
Luce, Henry A. (E)..629 David Whitney Bldg., Detroit 26
Lukas, John R.....7068 Michigan, Detroit 10
Lumpkin, John G., Jr.....243 E. Warren, Detroit
Lutz, Earl F.....13-204 General Motors Bldg., Detroit 2
Lyford, John, III.....Henry Ford Hosp., Detroit 2
Lynch, John M. (M)....F. A. Surgeon (R) F. E. H. Unit, U. S. Public Health Service, Bethesda 14, Md.
Lynn, David H.....2900 S. Fort St., Detroit
Lynn, Harvey D.....2900 So. Fort St., Detroit 25
Lyons, James H.....15651 Woodland Dr., Dearborn
Lyons, Wm. Harrington.....1012 Kales Bldg., Detroit 26
Lytle, Robert P.....411 Professional Bldg., Detroit 1

Maben, Hayward C., Jr.....9342 Oakland, Detroit 11
Mabley, J. Donald..1139 David Whitney Bldg., Detroit 26
MacCracken, Frances L.....3752 Gladstone, Detroit 6
MacDougall, O. P.....13700 Woodward, Detroit
MacFarlane, H. W.....1105 D. Whitney Bldg., Detroit 26
MacGregor, William W.....1904 David Broderick Tower, Detroit 26
Mack, Harold C.....955 Fisher Bldg., Detroit 2
MacKenzie, Earle D.....81 E. Kirby, Detroit
MacKenzie, Edward P.....12801 E. Jefferson, Detroit 14
MacKenzie, F. M.....641 David Whitney Bldg., Detroit 26
MacKenzie, John W...289 Rivard Blvd., Grosse Pointe 30
Mackersie, W. G.....18205 Roselawn, Detroit 21
MacMillan, F. B.....920 David Whitney Bldg., Detroit
MacMullen, Frank B. (R).....Box 393, Boca Raton, Fla.
MacPherson, K. C.....8100 E. Jefferson, Detroit 2
MacQueen, Malcolm D.....1654 1st National Bank Bldg., Detroit 26
Maczewski, John E.....9535 Jos. Campau, Detroit 12
Magnell, Ralph C.....8825 Puritan, Detroit
Maguire, C. E.....536 David Whitney Bldg., Detroit 26
Mahoney, Hugh M.....214 David Whitney Bldg., Detroit
Maibauer, Frederick P.....2966 Biddle, Wyandotte
Maino, Linus J.....2501 W. Grand Blvd., Detroit 8
Maire, Edward D.....15224 E. Jefferson, Grosse Pointe
Mair, Harold U.....10 Peterboro, Detroit 1
Majzoub, Ahmad J.....2900 S. Fort St., Detroit 25
Malachowski, B. T.....2501 W. Grand Blvd., Detroit 8
Malik, Edward A.....11302 Chalmers, Detroit 5
Malik, Nur M.....585 E. Grand Blvd., Detroit 7
Malina, Stephen.....15126 Heyden, Detroit 19
Malone, Richard S.....8445 E. Jefferson, Detroit
Maloney, John A.....1338 Maccabees Bldg., Detroit 2
Maltzer, Joseph H.....950 E. State Fair, Detroit 3
Mancuso, Vincent S.....962 E. Grand Blvd., Detroit 7
Mandiberg, Jack N.....12700 W. 7 Mile Rd., Detroit
Mann, Andrew D.....16715 Harper, Detroit 24

Manning, Morey H.....950 E. State Fair, Detroit
Mapletoft, Kenneth E. (M).....3545 Syracuse, Dearborn
Marcotte, Oliver J.....2890 W. Grand Blvd., Detroit 2
Marcus, Daniel B.....1122 Maccabees Bldg., Detroit 2
Marinus, C. J.....303 David Whitney Bldg., Detroit 26
Mark, Jerome.....903 Kales Bldg., Detroit 26
Markey, Alexander P.....13810 Michigan Ave., Dearborn
Markey, Frank R.....631 Selden, Detroit 1
Markoe, Rupert C. L.....4102 Brush St., Detroit 1
Marks, Ben.....902 Industrial Bank Bldg., Detroit 26
Marks, Bert W.....8250 Lincoln Dr., Huntington Woods
Marks, Morris H.....8233 W. Chicago Blvd., Detroit 4
Marsh, Alton R.....1218 Maccabees Bldg., Detroit 2
Marshall, James R.....14528 E. Jefferson, Detroit 15
Martin, Elbert A...1151 David Whitney Bldg., Detroit 26
Martin, J. B., Jr.....449 E. Elizabeth, Detroit 1
Martin, L. R.....2000 Second Blvd., Detroit 26
Martin, Peter A.....17185 Muirland, Detroit 21
Martin, R. D. (M).....Address unknown
Martin, Wilbur C.....7440 W. Jefferson, Detroit 17
Martineau, P. C.....1151 Taylor Ave., Detroit
Martinez, Pedro O.....1439 Bagley, Detroit 16
Martner, Edgar E.....526 Professional Bldg., Detroit
Marwil, T. B.....16965 Hamilton, Highland Park
Mason, P. W.....13311 E. Jefferson, Detroit
Mateer, John G.....Henry Ford Hosp., Detroit 2
Mattman, Paul E.....1422 Seyburn, Detroit
Mattson, Theodore M.....3919 John R, Detroit
Maun, Mark E.....1551 David Whitney Bldg., Detroit
Maxwell, J. H.....2415 W. Grand Blvd., Detroit 2
May, Frederick T.....608 Kales Bldg., Detroit 26
Mayer, E. V.....16525 Woodward Ave., Detroit 3
Mayer, Willard D.....510 Kales Bldg., Detroit 26
Maynard, F. M.....6525 Park, Allen Park
McAfee, F. W.....6828 Vinewood Ave., Detroit 8
McAlonan, William T.....10 Peterboro, Detroit 1
McAlpine, Gordon S.....658 Fisher Bldg., Detroit 2
McBroom, R. E.....10 Peterboro, Detroit
McCadie, James.....13700 Woodward, Detroit 3
McCain, French H.....970 Fisher Bldg., Detroit
McClelland, Rachel L.....461 Fisher Bldg., Detroit 2
McClellan, Robert J., Sr. (L).....
906 Michigan Theater Bldg., Detroit 26
McClellan, Robert J., II.....
906-8 Michigan Theater Bldg., Detroit
McClendon, James J.....503 E. Warren Ave., Detroit 1
McClintock, J. J.....14255 Greenfield, Detroit 27
McClure, R. W.....1306 David Whitney Bldg., Detroit 26
McClure, William R.....954 Fisher Bldg., Detroit 2
McColl, Charles W.....2826 Biddle, Wyandotte
McColl, Clarke M.....Henry Ford Hosp., Detroit 2
McColl, K. M.....20323 Mack Ave., Grosse Pointe Woods
McCollum, E. B.....761 David Whitney Bldg., Detroit 14
McCord, Carey P.....
University Hosp., 111 Maternity Bldg., Ann Arbor
McCormick, Colin C.....222 Shaefer Bldg., Dearborn
McCullough, L. E.....521 David Whitney Bldg., Detroit 26
McDonald, Angus L.....13856 Gratiot Ave., Detroit 5
McDonald, Wm. G.....7301 Schaefer Hwy., Dearborn
McDougall, B. W.....16190 James Couzens Hwy., Detroit
McDowell, D. B.....Wayne County General Hosp., Eloise
McEvitt, W. G.....1713 David Whitney Bldg., Detroit
McFadyen, H. A.....10 Peterboro, Detroit
McGarvah, A. W.....15105 W. 7 Mile Rd., Detroit 35
McGhee, Richard S.....10015 W. 8 Mile Rd., Detroit 21
McGillicuddy, W. E.....511 Kales Bldg., Detroit
McGinnis, Daniel H.....1025 E. Forest, Detroit 7
McGlaughlin, Nicholas D.....2312 Biddle Ave., Wyandotte
McGough, Joseph M.....14202 Fenkel Ave., Detroit 2
McGraw, Arthur B.....Henry Ford Hospital, Detroit 1
McGuire, Mary R.....763 Fisher Bldg., Detroit 21
McIntyre, W. B.....1533 David Whitney Bldg., Detroit
McKean, G. T.....1515 David Whitney Bldg., Detroit
McKean, R. M.....1515 David Whitney Bldg., Detroit
McKeever, George E.....1767 Culver, Dearborn
McKenna, Charles J.....1130 E. Grand Blvd., Detroit 11
McKinnon, John D.....106 W. Davison, Detroit 3
McKnight, R. E.....10030 W. McNichols Rd., Detroit
McLane, Harriet E.....4350 Oregon, Detroit 4
McLean, Don W.....1066 Fisher Bldg., Detroit 2
McLean, Harold G.....10 Peterboro, Detroit 1
McMorrow, Kathryn J.....26424 Oakland Dr., Inkster
McPherson, R. J.....12626 Myers Rd., Detroit 27
McQuiggan, Mark R.....1050 Fisher Bldg., Detroit 2
McRae, Donald H. (L)..275 W. Grand Blvd., Detroit 16
Meek, S. F.....13020 Kilbourne, Detroit
Meinecke, H. A.....1912 David Broderick Tower, Detroit
Mellen, Hyman S.....622 Maccabees Bldg., Detroit 2
Melnik, Maxim P. (A)....19479 Burlington Dr., Detroit 3
Menagh, Frank R.....Henry Ford Hosp., Detroit 2
Mendelssohn, R. J.....14427 Mack, Detroit 24
Merkel, Charles C.....85 Kercheval, Grosse Pointe 30
Merrill, William O.....958 Fisher Bldg., Detroit 2
Merritt, Earl G.....10 Peterboro, Detroit 1
Metes, John S.....14917 Gratiot, Detroit 5
Metzger, Harry C.....25504 Wavehan, Huntington Woods
Meyer, Ruben.....18254 Livernois, Detroit 21
Meyers, M. P.....2204 David Broderick Tower, Detroit
Meyers, Marjorie.....5320 John R St., Detroit 2
Meyers, Sidney S.....19635 Mack Ave., Detroit
Meyers, Solomon G.....1320 Maccabees Bldg., Detroit 2
Michael, Michael J.....703 Mutual Bldg., Detroit
Michels, Julius.....9424 Mack Ave., Detroit 14
Mihay, Benjamin (M)....14327 Michigan Ave., Dearborn
Mikesell, Wesley B., Jr.....21124 Goddard Rd., Dearborn
Miley, H. H.....8710 W. Davison, Detroit 4
Millard, Glenn E.....2900 W. Grand Blvd., Detroit 2
Miller, Daniel H.....8011 W. Vernor Hwy., Detroit 9
Miller, Elmer B.....10 Peterboro, Detroit 1
Miller, K. L.....1101 David Whitney Bldg., Detroit
Miller, Myron H.....8120 W. McNichols Rd., Detroit 21
Miller, M. M.....10514 E. Jefferson, Detroit
Miller, Robert B...1419 David Whitney Bldg., Detroit 26
Miller, Thomas H...1305 David Whitney Bldg., Detroit 26
Miller, W. E.....10 Peterboro, Detroit
Mills, C. C.....16190 James Couzens Hwy., Detroit 21
Mills, Georgia V.....1102 N. Maple, Royal Oak
Milton, S. B.....600 Palmerston Ave., River Rouge
Mintz, Edward I.....7401 Third Ave., Detroit 2
Mintz, Morris J.....16895 Livernois, Detroit 21
Miral, Solomon P.....4858 E. Davison, Detroit 12
Mishelevich, Sophie.....3008 W. Grand Blvd., Detroit 2
Missavage, Edward, Jr. (M).....
Casual Off. Sec., Personnel Center, Camp Kilmer, N. J.
Mitchell, Augustus W.....314 Visger Rd., River Rouge
Mitchell, C. Leslie.....Henry Ford Hosp., Detroit 2
Mitchell, D. P.....7713 Oakland, Detroit 11
Mitchell, Gertrude F.....650 W. Bethune, Detroit 2
Mitchell, Ralston S.....243 E. Warren, Detroit
Moehlig, Robert C.....964 Fisher Bldg., Detroit 2
Mogill, George.....3150 Second Ave., Detroit 6
Moisides, V. P.....1205 Stroh Bldg., Detroit 26
Moll, Clarence D.....10 Peterboro, Detroit 1
Molnar, S. K.....4525 S. Telegraph, Dearborn
Molner, Joseph G.....334 Bates St., Detroit
Mond, Edward..1812 David Broderick Tower, Detroit 26
Monson, Robert C.....16404 E. Warren, Detroit 24
Montante, Joseph R.....14447 W. 7 Mile Rd., Detroit 35
Montgomery, John C.....773 Fisher Bldg., Detroit 2
Monto, Raymond W.....Henry Ford Hospital, Detroit 2
Moore, John W.....8507 W. Eight Mile Rd., Detroit
Mopper, Coleman....2901 Holbrook, Suite 302, Detroit 12
Morand, Louis J.....641 David Whitney Bldg., Detroit 26
Morgan, D. N.....1807 David Whitney Bldg., Detroit
Moriarty, George J.....770 Fisher Bldg., Detroit 2
Morin, J. B. (L).....14416 Beech Rd., Detroit 23
Moritz, H. C.....1053 David Whitney Bldg., Detroit 26
Morley, Harold V.....205 Professional Bldg., Detroit 1
Morley, James A.....10520 Plymouth Ave., Detroit 4
Moroun, S. J.....8045 E. Jefferson, Detroit 14
Morris, Harold L.....1069 Fisher Bldg., Detroit 2
Morse, Plinn F.....Harper Hospital, Detroit 1
Morton, David G.....16901 W. McNichols, Detroit 19
Morton, John B. (E).....90 E. Warren, Detroit 1
Mosee, W. Jones.....5205 Hastings, Detroit 11
Mosen, Max M.....8015 Harper, Detroit 13

Moss, Ervin B.....1907 Pingree, Detroit 6
Moss, Nathan H.....2847 Trumbull, Detroit 16
Moss, Selma S.....18254 Livernois, Detroit 21
Mossman, J. D.....1052 Maccabees Bldg., Detroit 21
Mott, Carlin P.....2395 W. Grand Blvd., Detroit 8
Moulton, C. W. (A).....731 S. Ott Rd., Columbia, S. C.
Mullen, J. R.....7615 W. Vernor Hwy., Detroit
Munson, Henry T. E.....14344 E. Jefferson, Detroit
Murphy, D. J.....10 Peterboro, Detroit 1
Murphy, Eugene J.....18248 Joy Rd., Detroit 28
Murphy, John M.....710 David Whitney Bldg., Detroit
Murphy, Robert T.....113 Martin Place, Detroit 1
Murphy, Scipio G.....603 E. Forest, Detroit 1
Murphy, W. M.....10500 E. Warren, Detroit 14
Murray, Thomas H.....19345 W. McNichols, Detroit 19
Murray, William A.....11841 Ohio Ave., Detroit 4
Muske, Paul H.....5605 Michigan Ave., Detroit 10
Musselman, M. M.....Wayne County Gen'l Hosp., Eloise
Myers, D. W.....224 Professional Bldg., Detroit 1
Myers, Gordon B.....1512 St. Antoine, Detroit

Nagle, John W.....114 Maple, Wyandotte
Nahigan, Russell.....8830 W. McNichols Rd., Detroit 21
Nahoum, Antoine.....2201 E. Jefferson, Detroit
Naud, Henry J.....18456 Grand River Ave., Detroit 23
Naylor, A. H.....10033 Tireman, Dearborn
Neeb, Walter G.....16840 E. Warren, Detroit
Nehra, John N.....18514 Mack Ave., Detroit 36
Neill, Edwin J.....8045 E. Jefferson, Detroit 14
Nelson, Darwin M.....153 W. Grand Blvd., Detroit 16
Nelson, Harry M.....1067 Fisher Bldg., Detroit 2
Nelson, Victor E.....7345 Fenkell, Detroit
Newbarr, Arthur A.....1060 Fisher Bldg., Detroit 21
Newman, M. K.....16861 Wyoming Ave., Detroit
Nichamin, Samuel J.....672 Maccabees Bldg., Detroit 2
Nickels, Albert W.....471 Fisher Bldg., Detroit 2
Nickerson, I. D.....604 Medical Arts Bldg., Detroit
Nielsen, Aage E.....10 Peterboro, Detroit 1
Nigro, Norman D.....10 Peterboro, Detroit 1
Nill, John B.....6030 Grandy, Detroit 11
Nill, William F.....6030 Grandy, Detroit 11
Noble, William C.....4045 W. Jefferson, Ecorse 18
Nolan, Bernard E.....932 Maccabees Bldg., Detroit 2
Nolte, E. C.....3919 John R, Detroit
Nolting, Wilfred S. H.....15850 E. Warren, Detroit 24
Norconk, A. A.....859 Fisher Bldg., Detroit 2
Norcott, Edith S.....16350 Mack Ave., Detroit 24
Norris, Edgar H.....607 Lakepointe, Grosse Pointe 30
Northcross, David C.....668 Winder, Detroit 1
Norton, A. B.....1076 Maccabees Bldg., Detroit
Norton, Charles S. (L).....3503 14th St., Detroit 8
Noshay, William C.....Henry Ford Hosp., Detroit 2
Novy, R. L.....858 Fisher Bldg., Detroit 2
Nowicki, Joseph A.....3841 Junction, Detroit 10
Nunn, James W.....106 W. Davison, Detroit 3

O'Brien, E. J.....307 David Whitney Bldg., Detroit 26
O'Brien, G. M.....2501 W. Grand Blvd., Detroit 8
O'Connor, Katheryn L.....
14301 Grand River Ave., Detroit 27
O'Donnell, Charles H.....10 Peterboro, Rm. 504, Detroit
O'Donnell, David H. (E)..2501 W. Grand Blvd., Detroit
O'Donnell, Dayton H., Jr...2501 W. Grand Blvd., Detroit
Oetting, E. M.....8045 E. Jefferson, Detroit 14
Ohmart, Galen B.....8721 E. Jefferson, Detroit 14
Ohrt, Harold F.....285 E. Grand Blvd., Detroit 7
Okun, Milton H.....3261 Sherbourne Rd., Detroit 21
Olechowski, Leo W. C., Cmdr. MC USN (M).....
U. S. Naval Hospital, New Port, R. I.
Olen, Alex.....13100 Harper, Detroit 13
O'Linn, Francis P.....1055 Fisher Bldg., Detroit 2
Olmsted, George S.....2405 W. 6 Mile Rd., Detroit 3
Olmsted, W. R. (L)..219 Broadway Market Bldg., Detroit
Olson, James A.....28 W. Adams, Suite 911, Detroit 26
Oman, Cyrus F.....12608 Wyoming Ave., Detroit 4
Oppenheim, J. M.....506 Kales Bldg., Detroit 6
Orecklin, Leo.....914 Maccabees Bldg., Detroit 2
Organ, Fred W.....10304 Woodward Ave., Detroit 2
Ormond, John K. (A)..1169 N. Woodward, Birmingham
Ornstein, Charles.....19504 Kelly Rd., Detroit 24
O'Rourke, Paul V...307 David Whitney Bldg., Detroit 26
O'Rourke, R. M.....7384 Twelfth St., Detroit 6
Oritz, Augusto (M).....9545 Sanilac, Detroit
Osius, Eugene A.....901 David Whitney Bldg., Detroit 26
O'Sullivan, Girardin S.....18129 Sunnybrook, Birmingham
Ott, Harold A.....3019 N. Woodward Ave., Royal Oak
Ottaway, John P...1337 David Whitney Bldg., Detroit 26
Owen, Clarence I.....4160 John R, Detroit 1
Owen, James A.....67 E. Forest, Detroit 1

Palevich, Matthew D.....8709 Joseph Campau, Detroit
Palmer, Alice E.....3919 John R, Detroit 1
Palmisano, I. J.....25447 Plymouth Rd., Detroit 28
Panic, S. M.....1001 W. 7 Mile Rd., Detroit
Pangburn, L. E.....7 Avalon, Detroit
Parker, Benjamin R.....17306 W. 7 Mile Rd., Detroit 19
Parker, W. R. (E).....1025 David Whitney Bldg., Detroit
Parnell, John W.....
1297 Lochmoor Blvd., Grosse Pointe Woods 30
Parr, Robert W.....8-265 Gen. Motors Bldg., Detroit 2
Parsons, J. P.....808 Grand Marais, Grosse Pointe Park
Pasternacki, Norbert T.....6203 Chene, Detroit 11
Paterson, Walter G. (L).....471 Fisher Bldg., Detroit 3
Patton, T. B.....1209 Kales Bldg., Detroit 26
Pawlowski, Jerome I.....2009 E. Grand, Detroit
Payne, E. H.....Box 118, Roosevelt Park Annex, Detroit
Paysner, Harry A.....13700 Woodward Ave., Detroit 3
Peabody, Charles W.....474 Fisher Bldg., Detroit
Pearce, A. J.....1304 N. Delaware, Indianapolis
Pearlman, Jack (M).....1017 Westbrook, Rome, N. Y.
Pearman, C. L. R.....1509 Kales Bldg., Detroit
Pearse, Harry A.....852 Fisher Bldg., Detroit 2
Pedersen, Herbert E.....1209 Kales Bldg., Detroit
Peggs, George F.....5419 Livernois, Detroit 10
Penberthy, G. C.....1515 David Whitney Bldg., Detroit 26
Pendy, George V.....1808 David Broderick Tower, Detroit
Pendy, John M...1401 David Whitney Bldg., Detroit 26
Pensler, Leslie.....8844 Joy Rd., Detroit
Pensler, M. M.....8844 Joy Road, Detroit
Pequegnot, C. F. (L).....6283 W. Outer Drive, Detroit
Perdue, Grace M.....762-63 Fisher Bldg., Detroit 2
Perkin, Frank S.....970 Fisher Bldg., Detroit 2
Perlis, H. L.....1036 Maccabees Bldg., Detroit 2
Peterman, Earl A...801-2 Med. Arts Bldg., Highland Park
Petix, Samuel C.....19207 Schaefer, Detroit 21
Petoskey, Edward A.....6004 West Fort, Detroit 9
Petty, Thomas A. (M)....6434 Oakman Blvd., Dearborn
Pevin, Pauline.....18709 Meyers Road, Detroit 21
Pevin, Philip S.....18709 Meyers Rd., Detroit
Pfeiffer, Rudolph L. (L)....469 E. Grand Blvd., Detroit 7
Phillipson, Chester.....7411 Third Ave., Detroit 2
Picard, J. D.....13349 Michigan Ave., Dearborn
Piccone, Louisa.....10605 W. Warren, East Dearborn
Pichette, J. Walton.....15146 Michigan Ave., Detroit
Pickard, Orlando W.....952 Fisher Bldg., Detroit 2
Pierce, Frank L. (L).....Dowagiac
Pierson, M. J.....1030 Maccabees Bldg., Detroit
Pietraszewski, A. W.....10338 Joseph Campau, Detroit 12
Pinckard, Karl G.....932 Mason St., Dearborn
Pink, Rose M.....11413 Joseph Campau, Detroit
Pinney, L. J.....28 W. Adams Ave., Detroit
Pino, Ralph H.....208 David Whitney Bldg., Detroit 26
Piper, Ralph R.....1530 McKinstry Ave., Detroit 7
Pittman, J. E.....1613 David Whitney Bldg., Detroit 26
Plaggemeyer, H. W. (L).....
1701 David Whitney Bldg., Detroit 26
Platz, Carol K.....11368 Kelly Rd., Detroit
Pliskow, Harold.....1022 Maccabees Bldg., Detroit 2
Podolsky, Harold M.....2785 S. Fort, Detroit 25
Poirier, Ralph A.....1405 Mutual Bldg., Detroit 26
Polentz, Charles P.....10 Peterboro, Detroit 1
Polk, John E. (M).....8742 Twelfth St., Detroit 6
Pollack, John J.....18200 Wyoming Ave., Detroit 21
Ponka, Joseph L.....Henry Ford Hosp., Detroit 2
Pool, Walter D.....14320 E. Jefferson, Detroit
Poos, Edgar E.....554 Fisher Bldg., Detroit 2
Porretta, Anthony C.....11146 Gratiot, Detroit 5
Porretta, F. S.....1076 Maccabees Bldg., Detroit 2
Porter, Howard J. (R).....36911 Goddard Rd., Romulus

Portnoy, Harry.....4253 Leslie, Detroit
Posch, J. L.....1410 Kales Bldg., Detroit
Posner, Irving.....12901 W. 7 Mile Rd., Detroit 21
Pratt, Jean P. (L).....18910 Fairway Drive, Detroit 21
Pratt, Lawrence A.....3919 John R, Detroit
Prendergast, John J.....Box 14, Dryden
Preston, Ruth E.....460 Fisher Bldg., Detroit 2
Priborsky, Benjamin H.....742 Maccabees Bldg., Detroit 2
Price, Alvin Edwin.....313 David Whitney Bldg., Detroit
Price, A. H.....62 W. Kirby, Detroit 2
Priest, R. J.....Henry Ford Hosp., Detroit
Prisbe, Edward J.....16603 Plymouth Rd., Detroit 27
Priver, Julien.....6741 W. Outer Drive, Detroit 35
Procailo, A. B.....29627 Ford Rd., Garden City
Proctor, Bruce.....1419 David Whitney Bldg., Detroit 26
Proud, Robert H.....26151 Huron River Drive, Flat Rock
Pugh, Howard C...1165 David Whitney Bldg., Detroit 26
Pugliesi, Benedetto.....9489 E. Outer Drive, Detroit 5
Purcell, F. H.....1808 David Broderick Tower, Detroit
Purves, William H. L.....18501 Snowden, Detroit

Quigley, Eugene H.....22340 Michigan, Dearborn
Quigley, William G.....742 Maccabees Bldg., Detroit
Quinn, E. L.....Henry Ford Hosp., Detroit

Rabinovitch, Bella M.....610 Griswold Bldg., Detroit
Rahm, Lambert P.....14411 E. Jefferson, Detroit
Raiford, F. P.....1308 Broadway, Detroit
Raiford, Frank P., Jr.....701 W. Boston Blvd., Detroit 2
Randall, D. S.....7815 E. Jefferson, Detroit
Rasi, Howard B.....1713 David Whitney Bldg., Detroit
Raskin, Herbert A.....23861 Seneca, Oak Park
Raskin, Morris.....987 E. Jefferson, Detroit
Rastello, Peter B.....6307 W. Fort St., Detroit 9
Ratigan, Carl S.....22276 Garrison, Dearborn
Rau, Frederick W.....113 Martin Place, Detroit
Ray, K. J., Lt. (jg) (M).....
1754 Sixth Ave. N., St. Cloud, Minn.
Raynor, Harold F.....13700 Woodward, Detroit
Rebuck, John W.....Henry Ford Hosp., Detroit
Reder, Benjamin.....20731 Evergreen, Detroit
Redding, Lowell G.....1336 Southfield, Lincoln Park 25
Redfern, William E.....Henry Ford Hosp., Detroit 2
Reed, H. W.....8150 Grand River Ave., Detroit 4
Reed, J. O. Jr.....434 St. Clair, Grosse Pointe
Reed, Ivor E.....305 David Whitney Bldg., Detroit 26
Rees, Howard C.....15700 Mack Ave., Detroit 24
Reichling, R. J., Jr. (A).....
18514 Mack, Grosse Pointe Farms 30
Reid, J. G.....1337 David Whitney Bldg., Detroit
Reid, Wesley G.....974 Fisher Bldg., Detroit 2
Reiff, Morris V.....10241 Joy Rd., Detroit
Reinbolt, C. A. (L).....
33570 Quaker Valley Rd., Farmington
Reinsh, Ernest R.....8674 Muirland Ave., Detroit
Reisman, Nathan J.....1122 Maccabees Bldg., Detroit 2
Reisman, S. G.....1078 Maccabees Bldg., Detroit
Reive, David L.....24401 Plymouth, Detroit 28
Rennell, Leo P.....2567 West Grand Blvd., Detroit 8
Renton, George W.....1530 Seward, Apt. 209, Detroit
Reske, Alven A.....22177 Michigan Ave., Dearborn
Reveno, William S.....958 Fisher Bldg., Detroit 2
Reyner, C. E.....515 Professional Bldg., Detroit 2
Reynolds, Lawrence.....10 Peterboro, Detroit 1
Reynolds, R. P.....858 Fisher Bldg., Detroit 2
Rezanka, H. J.....952 Westchester Rd., Grosse Pointe 30
Rhoades, Francis P.....970 Maccabees Bldg., Detroit 2
Rice, Harold B.....10 Peterboro, Detroit 1
Rice, Meshel.....2415 W. Grand Blvd., Detroit 8
Richardson, Allan L.....651 Fisher Bldg., Detroit 2
Richardson, R. P.....3714 Monroe Ave., Detroit
Richardson, Robert P., Lt. (jg) (M).....
Cur-Des-Pac., San Diego, Calif.
Rick, Paul J.....4227 Mt. Elliott, Detroit 7
Ridge, Ralph W.....114 Maple St., Wyandotte
Rieckhoff, George G...14905 E. Jefferson Ave., Detroit 15
Rieg, John F.....5695 W. Vernor Hwy., Detroit 9
Rieger, John B.....1265 David Whitney Bldg., Detroit 26
Rieger, Mary H.....746 Pallister, Detroit
Riethmiller, R. F. (M).....623 Pemberton Rd., Detroit
Rinkel, Robert W.....6586 Allen Rd., Allen Park
Riseborough, E. C.....90 E. Warren, Detroit 1
Ritter, George.....28420 Sunset Drive, Birmingham
Rizzo, Frank.....1379 Berkshire Rd., Grosse Pointe Park
Robb, Edward L.....17380 Livernois, Detroit
Robb, Herbert F.....381 S. Main St., Belleville
Robb, J. M.....641 David Whitney Bldg., Detroit 26
Roberts, Arthur J.....1310 Warwick, Lincoln Park
Robertson, P. H.....962 Fisher Bldg., Detroit
Robertson, S. B.....962 Fisher Bldg., Detroit
Robins, Samuel C.....18963 Jas. Couzens Hwy. Detroit 21
Robinson, Fred L.....13530 Michigan, East Dearborn
Robinson, G. W. (L).....1701 E. Grand Blvd., Detroit
Robinson, H. A.....987 E. Jefferson, Detroit 1
Robinson, Howard.....953 Fisher Bldg., Detroit
Robinson, R. G.....3751 31st St., Detroit 10
Roeglin, O. F. F...18412 Mack Ave., Grosse Pointe Farms
Rogers, Aaron Z...20451 Mack Ave., Grosse Pointe Woods
Rogers, George E. B.....
2108 David Broderick Tower, Detroit 26
Rogers, James D.....2966 Biddle Ave., Wyandotte
Rogin, James R.....3027 David Stott Bldg., Detroit 26
Rogoff, Abraham S.....1328 Maccabees Bldg., Detroit 2
Rohde, Paul C.....912 Maccabees Bldg., Detroit 2
Rom, Jack.....8600 W. McNichols, Detroit
Roman, Stanley J.....742 Maccabees Bldg., Detroit 2
Ronayne, J. J.....16116 W. McNichols Rd., Detroit
Roney, Eugene H.....17187 Schaefer Hwy., Detroit
Rosbolt, Oscar P.....8505 Plymouth Rd., Detroit 4
Rosefield, J. L.....65 W. Hancock, Detroit
Rosen, H. M.....8830 W. McNichols, Detroit
Rosen, T. S.....18700 Meyers Rd., Detroit
Rosenbaum, Herbert.....19776 Snowden Ave., Detroit 35
Rosenbloom, Alvin B.....Wayne Co. Gen. Hosp., Eloise
Rosenthal, Louis H.....1318 Maccabees Bldg., Detroit
Rosenthal, Samuel A.....16350 Hamilton, Detroit 3
Rosenwach, F. F.....20429 W. 7 Mile Rd., Detroit
Rosenzweig, Saul....2114 David Broderick Tower, Detroit
Ross, B. C.....4493 14th St., Detroit
Ross, D. G.....654 St. Clair at Kercheval, Grosse Pointe
Ross, Hyman.....19149 Joy Rd., Detroit 28
Rotarius, Edward M.....
1030 So. Brys Drive, Grosse Pointe Woods 36
Roth, Edward T.....640 E. Grand Blvd., Detroit 7
Roth, Theodore I.....60 W. Hancock, Detroit
Rothbart, Harold B.....773 Fisher Bldg., Detroit 2
Rothman, Emil D.....722 Maccabees Bldg., Detroit 2
Rothman, H. R.....20171 Canterbury, Detroit 21
Rottenberg, Leon.....13419 Fenkell, Detroit 27
Rowda, Michael S.....2001 E. Grand Blvd., Detroit 11
Rucker, Julian J.....668 Farnsworth Ave., Detroit 2
Ruedemann, A. D...1633 David Whitney Bldg., Detroit 26
Ruedemann, A. D. Jr...1633 David Whitney Bldg., Detroit
Rueger, Milton J.....708 Kales Bldg., Detroit 26
Rueger, Ralph C.....9149 E. Jefferson, Detroit 14
Runge, Edward F.....14 Abbot Lane, Dearborn
Rupp, J. R.....7056 W. Fort, Detroit
Rupprecht, Emil F.....5525 W. Chicago Blvd., Detroit
Rush, Alva D.....60 W. Hancock, Birmingham
Ruskin, S. H.....1306 David Broderick Tower, Detroit
Russell, John C. (L).....2934 E. Davidson, Detroit 3
Rutzen, Arthur C.....771 Fisher Bldg., Detroit 2
Ryan, James M.....19207 Schaefer Rd., Detroit 35
Rydzewski, J. B.....12170 Joseph Campau, Detroit 12
Ryerson, F. L. (A).....630 Merrick, Detroit 3
Ryerson, F. S.....28 W. Adams, Suite 802, Detroit

Sacchetti, J. V.....Wayne Co. Gen'l Hosp., Eloise
Sack, Anthony G.....2567 W. Grand Blvd., Detroit 8
Sa'di, Lutfi M.....525 Professional Bldg., Detroit 1
Sadler, Henry H., Jr.....1512 St. Antoine, Detroit
Sadzikowski, Joseph T.....1320 N. Denwood, Dearborn
Sage, Bernard A.....1013 Haigh, Dearborn
Sage, Edward O. (E).....415 Burns Drive, Detroit
Sage, Thomas.....7815 E. Jefferson, Detroit 14
Sager, Edward L.....13902 Gratiot Ave., Detroit 5
St. Amour, Hector J.....9545 Grand River, Detroit
St. Louis, R. J.....10909 W. Jefferson, River Rouge 18
Sakorraphos, Stelios N.....1346 Broadway, Detroit 26

Salchow, P. T.....Herman Kiefer Hosp., Detroit
Salisbury, Carolyn S.....527 Professional Bldg., Detroit
Salomon, James L.....2900 S. Fort St., Detroit 25
Salowich, John N.....15235 Harrison, Allen Park
Saltzstein, Harry C.....966 Fisher Bldg., Detroit 2
Sand, Harry H.....2471 S. Telegraph, Dearborn
Sander, Irvin W.....5050 Cass Ave., Detroit 2
Sanders, Alex W.....920 Maccabees Bldg., Detroit 2
Sanderson, Alvord R.....
978 Pemberton Rd., Grosse Pointe Park
Sanderson, Suzanne M.....15 E. Kirby, Detroit
Sandler, Nathaniel.....1004 Kales Bldg., Detroit 26
Sands, G. E.....12746 Broadstreet, Detroit
Sandweiss, D. J.....9739 Dexter Blvd., Detroit 6
Sapala, M. Andrew.....6356 Michigan, Detroit
Saraf, L. B.....14540 E. Warren, Detroit
Sargent, Richard C.....17357 Fenkell Ave., Detroit 27
Sargent, William R.....15036 Oakfield, Detroit 27
Sarracino, J. B. (A).....532 Marquette Dr., Detroit 14
Sauk, John J.....640 Maccabees Bldg., Detroit
Saunders, W. H. (A).....1801 E. Stadium, Ann Arbor
Sauter, Simon H.....1082 E. Grand Blvd., Detroit 7
Savignac, Eugene M.....4777 E. Outer Drive, Detroit 12
Scarney, Herman D.....573 Fisher Bldg., Detroit 2
Schaefer, R. L.....1206 Kales Bldg., Detroit 26
Schaefer, R. L. Jr.....1512 St. Antoine St., Detroit
Schaeffer, Martin.....
1404 David Broderick Tower, Detroit 26
Schane, David A. (M).....17157 Mendota, Detroit 21
Scheinberg, Schayel.....966 Fisher Bldg., Detroit
Schembeck, I. S.....1655 David Whitney Bldg., Detroit 26
Schiff, Donald W. (M).....U.S.P.H. Service, Turtle
Mt. Consolidated, Indian Agency, Belcourt, N. D.
Schiller, A. E.....2008 David Broderick Tower. Detroit
Schillinger, Harold K.....4838 Neckel, Dearborn
Schinagel, Geza.....4400 Livernois, Detroit 10
Schirack, Ray D.....15850 E. Warren Ave., Detroit 24
Schkloven, Norman.....532 Maccabees Bldg., Detroit
Schlafer, Nathan H.....
1806 David Broderick Tower, Detroit 26
Schlemer, John H.....13826 Dexter Blvd., Detroit 6
Schlesinger, Henry.....13534 Woodward, Detroit 3
Schmaltz, John D.....1701 David Broderick Tower, Detroit
Schmidt, Harry E.....667 Fisher Bldg., Detroit 2
Schmidt, Milton R.....2615 W. Jefferson, Trenton
Schmidt, Werner F.....1807 Stroh Bldg., Detroit
Schmier, Burton L.....5440 Cass, Detroit 2
Schmitt, Norman L.....10127 W. McNichols, Detroit 21
Schmitt, Phillip E.....18440 Greenfield, Detroit 35
Schneck, R. J.....641 David Whitney Bldg., Detroit 26
Schneider, Charles L.....22148 Michigan, Dearborn
Schneider, Curt P.....655 Fisher Bldg., Detroit 2
Scholes, Daniel R.....113 Martin Place, Detroit 1
Schooten, Sarah S.....954 Maccabees Bldg., Detroit 2
Schorr, Robert L. (E).....1325 E. Jefferson, Detroit 7
Schraer, Paul H.....7220 Gratiot Ave., Detroit 13
Schreiber, Frederic.....10 Peterboro, Detroit 1
Schrier, Christian F.....Fleetwood Plant,
West Fort at West End, Detroit
Schroeder, Carlisle F.....7815 E. Jefferson, Detroit
Schulte, Carl H.....808 Mutual Bldg., Detroit 26
Schultz, Ernest C.....840 David Whitney Bldg., Detroit 26
Schwartz, Benjamin.....275 W. Grand Blvd., Detroit 16
Schwartz, Louis A.....861 Fisher Bldg., Detroit 2
Schwartz, Oscar D.....7441 W. Seven Mile Rd., Detroit
Schwartzberg, Jos. A.....5001 14th St., Detroit 8
Schweigert, C. F.....10627 Cadieux, Detroit 24
Sciarrino, Stanley V.....15388 Livernois, Detroit 21
Scott, R. J.....7333 W. 7 Mile Rd., Detroit 21
Scott, William J.....79 Kercheval, Grosse Pointe Farms
Scoville, Victor T.....Box 503, Sioux City, Iowa
Scruton, Foster D.....5419 Livernois, Detroit 10
Seabrooks, B. F., Jr.....9136 Oakland Ave., Detroit
Secord, Eugene W.....761 Fisher Bldg., Detroit 2
Seeley, James B.....13530 Michigan Ave., Dearborn
Seeley, Ward F.....1807 David Whitney Bldg., Detroit 26
Seelye, Juliette.....1050 Fisher Bldg., Detroit 2
Segar, Laurence F.....
1410 David Broderick Tower, Detroit 26
Seibert, Alvin H.....
1180 Bedford Rd., Grosse Pointe Park 30
Seiferlein, A. L.....508 David Whitney Bldg., Detroit 26
Self, William G.....19365 Mack Ave., Detroit
Sellers, Charles W.....2314 W. Grand Blvd., Detroit 8
Sellers, Graham A.....2405 W. McNichols Rd., Detroit 21
Selman, J. H.....8942 Dexter Blvd., Detroit 6
Serrester, Bernard F.....18650 W. Warren, Detroit 10
Seski, Arthur G.....863 Fisher Bldg., Detroit 2
Sewell, George.....1116 David Whitney Bldg., Detroit 26
Sewell, Guy W.....16321 Mack Ave., Detroit 24
Shafarman, Eugene M.....5320 John R, Detroit 2
Shaffer, Jos. H.....Henry Ford Hosp., Detroit 2
Shaffer, Loren W...325 Kercheval, Grosse Pointe Farms 36
Shafter, Royce R.....Eastlawn Sanatorium, Northville
Shanoski, Stanley J.....728 Maccabees Bldg., Detroit
Shapiro, I. Allen.....4400 Livernois, Detroit 21
Shapiro, Jacob.....9110 Kercheval, Detroit 14
Shapiro, Reuben I.....636 Maccabees Bldg., Detroit
Sharrer, Charles H.....873 Lakewood, Detroit 15
Shaw, Norman D.....22128 Cleveland St., Dearborn
Sheldon, J. A. (L).....
1435 Three Mile Drive, Grosse Pointe Park 30
Shelden, Warren E.....14215 W. McNichols Rd., Detroit
Shelton, C. F.....910 David Broderick Tower, Detroit 26
Sherman, William LaRue.....10 Peterboro, Detroit 1
Sherman, Wm. L., Jr.....201 E. Kirby, Detroit 2
Sherrin, E. R.....17555 James Couzens Hwy., Detroit 35
Sherwood, DeWitt L. (L).....
6170 Michigan Ave., Detroit 10
Shewchuk, Alexander P.....7300 Allen Rd., Allen Park
Shields, William L.....18600 Woodward, Detroit 3
Shifrin, Peter G.....767 Fisher Bldg., Detroit 2
Shiovitz, Louis.....5419 Michigan Ave., Detroit 10
Shipley, Richard E.....Henry Ford Hosp., Detroit
Shlain, Benjamin.....10244 W. 7 Mile Rd., Detroit
Shortz, Gerald.....
1649 Broadstone Rd., Grosse Pointe Woods 30
Shotwell, Carlos W. (L)....1411 Atkinson Ave., Detroit 6
Shreve, Alfred J.....10149 Michigan, Dearborn
Shulak, Irving B.....
1714 David Broderick Tower, Detroit 26
Shulman, Herschel A.....622 Maccabees Bldg., Detroit
Shumaker, E. J.....22691 Michigan, Dearborn
Siddall, Roger S.....955 Fisher Bldg., Detroit 2
Sieber, Edward H.....15146 Michigan Ave., Dearborn
Siefert, John L.....12720 E. Outer Drive, Detroit
Siefert, William A.....16849 Grand River, Detroit 29
Siegel, Henry.....7441 W. 7 Mile Rd., Detroit
Sill, Jack A.....19635 Mack Ave., Detroit 30
Silvarman, I. Z.....9103 Van Dyke, Detroit 13
Silver, I. W.....20000 W. Chicago, Detroit 28
Silverman, Maurice M.....3925 Joy Rd., Detroit 6
Silverman, Max.....11340 Dexter Blvd., Detroit 6
Simmons, Donald R.....815 Kales Bldg., Detroit
Simon, Emil R.....1020 Maccabees Bldg., Detroit 2
Simon, Heinz G.....5097 Balfour Rd., Detroit 24
Simpson, Clarence E. (L).....18448 Prest, Detroit 35
Sinclair, James W.....11801 Morang Drive, Detroit 24
Singer, Floyd W.....24441 Emerson, Dearborn
Sippola, George W.....13603 LaSalle, Detroit 6
Sisson, John M.....17201 W. McNichols, Detroit
Sklover, Joseph I.....1326 E. Seven Mile Rd., Detroit
Skrzycki, Stephen S.....10040 Joseph Campau, Detroit 12
Skully, Edward J.....14000 Linnhurst, Detroit
Sladen, F. J. (L).....Henry Ford Hosp., Detroit
Slahetka, Vincent E.....7435 Michigan, Detroit 10
Slaugenhaupt, J. G.....600 Griswold, Suite 602, Detroit 26
Slaughter, F. M.....455 E. Adams, Detroit 26
Slazinski, Leo W.....7618 Michigan, Detroit 10
Slevin, John G.....
1514 David Broderick Tower, Detroit 26
Sliwin, Edward P.....641 David Whitney Bldg., Detroit
Slusky, Joseph.....1826 Oakman Blvd., Detroit
Small, Henry.....11507 Hamilton, Detroit 2
Smathers, Homer M.....1405 Kales Bldg., Detroit 27

Smeck, Arthur R.....1036 Waterman, Detroit 9,
Smith, Clarence V.....1716 E. Grand Blvd., Detroit 11
Smith, Claude A.....15 Linden St., River Rouge 18
Smith, F. J.....Henry Ford Hosp., Detroit
Smith, Henry L.....16401 Grand River Ave., Detroit 27
Smith, J. Allen.....14140 Puritan, Detroit 27
Smyka, Stanley M.....6111 Charles St., Detroit
Snedeker, Bernard C.....18800 Woodward Ave., Detroit 3
Snow, L. W.....508 W. Main St., Northville
Snyder, Arthur M.....503 Med. Arts Bldg., Detroit
Sobel, Robert A.....18254 Livernois, Detroit
Socall, Charles J.....8500 Mt. Elliott, Detroit 11
Sokol, William M.....10 Peterboro, Detroit 1
Sokolov, Raymond A.....755 Fisher Bldg., Detroit 2
Solomon, Abraham, B. (M)....16636 W. Chicago, Detroit
Somers, Donald C.....3919 John R Detroit 1
Sonda, Lewis P.....554 David Whitney Bldg., Detroit 26
Sorock, Milton L.....3027 David Stott Bldg., Detroit 26
Spademan, Loren C.....
1013 David Whitney Bldg., Detroit 26
Spalding, Edward D.....10 Peterboro, Detroit 1
Sparling, Harold I. (M).....
2101-1 USA Hosp., Fort Meade, Md.
Speck, Carlos C.....6525 Park Ave., Allen Park
Spector, Maurice J.....12504 E. Jefferson, Detroit 15
Spero, Gerald D.....7330 W. Seven Mile Rd., Detroit 21
Sperry, Frederick L.....463 Fisher Bldg., Detroit 2
Spiro, Adolph S.....11255 Mack Ave., Detroit 15
Springborn, B. R.....15818 E. Warren, Detroit 24
Sprunk, Carl J.....869 Fisher Bldg., Detroit 2
Spurrier, Ethelbert....1048 David Whitney Bldg., Detroit
Squires, W. H.....Wayne Co. Gen. Hosp., Eloise
Stafford, Frank W. J.....1111 Griswold, Detroit 26
Stalker, Hugh.....15315 E. Jefferson, Grosse Pointe 30
Stamell, B. B.....658 Maccabees Bldg., Detroit
Stamell, Meyer.....14634 Greenfield, Detroit
Staniszewski, Casimir.....1301 W. Grand Blvd., Detroit
Stanton, James M.....1001 Mutual Bldg., Detroit 26
Stanton, Myron R.....3400 W. Warren, Detroit 8
Stapleton, William J., Jr. (E).....
641 David Whitney Bldg., Detroit 26
Starrs, Thomas C. (L)..509 Fox Theater Bldg., Detroit 1
Staryk, Steven E.....19204 Keystone, Detroit 34
Staub, Howard P.....14382 Mansfield, Detroit 27
Stearns, A. B.....504 Doctors Bldg., Detroit 1
Stebbins, Charles E.....856 Fisher Bldg., Detroit
Steele, Hugh H.....Henry Ford Hosp., Detroit 2
Stefani, Ernest L.....4126 W. McNichols, Detroit 21
Stefani, Raymond T.....13516 Stoepel, Detroit 4
Steffensen, Ellis H.....Henry Ford Hosp., Detroit
Stein, Albert H.....19334 San Juan Drive, Detroit 21
Stein, Edward.....909 Kales Bldg., Detroit 26
Stein, James R.....125 W. Nine Mile Rd., Ferndale
Stein, Saul C.....23105 Van Dyke, Van Dyke
Steinbach, Albert L...1229 David Whitney Bldg., Detroit
Steinbach, Henry B.....
1229 David Whitney Bldg., Detroit 26
Steinberger, Eugene J.....6402 W. Fort St., Detroit 9
Steiner, Frederick B.....29627 Ford Rd., Garden City
Steiner, Gabriel.....10 Peterboro, Detroit 1
Steiner L. J.....Henry Ford Hosp., Detroit
Steinhardt, Milton J.....670 Maccabees Bldg., Detroit 2
Stellhorn, Chester E.....12900 W. 7 Mile Road, Detroit 21
Stellhorn, Mary Christine.....16616 Mack Ave., Detroit
Stenborg, Walter P. (M)....1301 College Drive, Houghton
Stephens, Homer C.....4302 McGraw, Detroit
Sterba, Richard F.....1130 Parker, Detroit 14
Sterling, Robert R.....
1541 David Whitney Bldg., Detroit 26
Stern, Edward A.....12710 Dexter, Detroit 6
Stern, H. L.....14137 Warwick, Detroit 23
Stern, Julian.....1314 David Whitney Bldg., Detroit 26
Stern, Leonard H.....22699 Van Dyke, Van Dyke
Stern, Louis D.....1049 David Whitney Bldg., Detroit
Stevens, C. H.....15422 Manor, Detroit 21
Stevenson, Charles S.....1405 Kales Bldg., Detroit
Stewart, M. M., Jr.....411 Professional Bldg., Detroit
Stewart, Thomas O.....17187 Schaefer Hwy., Detroit 35
Stiefel, Daniel M.....
1563 David Whitney Bldg., Detroit 26
Stillwater, Karl.....18311 Appoline, Detroit 35
Stirling, Alexander M.....10 Peterboro St., Detroit
Stith, Dwight E.....505 Owen, Detroit 2
Stobbe, Godfrey D.....Grace Hospital, Detroit
Stocker, Lawrence L.....
7330 W. Seven Mile Rd., Detroit 21
Stocker, Marvin L.....16401 Grand River Ave., Detroit
Stockwell, B. W.....
703 Doctors Bldg., 3919 John R., Detroit
Stokfisz, Thaddeus.....7012 Michigan Ave., Detroit 10
Straith, Claire L.....1713 David Whitney Bldg., Detroit 26
Straith, R. E.....1713 David Whitney Bldg., Detroit
Strand, Martin E.....22400 Cherry Hill, West Dearborn
Stricker, Henry D.....5624 W. Fort St., Detroit 9
Strickroot, Fred L.....707 Kales Bldg., Detroit
Strohschein, D. F.....1063 Fisher Bldg., Detroit 2
Strutz, William C.....1553 Woodward Ave., Detroit
Stryker, Joan C.....2853 Biddle St., Wyandotte
Stryker, Walter A.....Wyandotte Gen. Hosp., Wyandotte
Stubbs, C. T.....13930 Woodward, Detroit 3
Stubbs, Harold W.....13930 Woodward, Detroit 3
Stuecheli, Milton B.....1230 Bishop Rd., Grosse Pointe
Stump, George D...1314 David Whitney Bldg., Detroit 26
Sugar, David I.....13120 Broadstreet, Detroit
Sugar, H. Saul.....311 Kales Bldg., Detroit
Sugarman, Marcus H.....9739 Dexter, Detroit 6
Sullivan, Hugh A...1053 David Whitney Bldg., Detroit 26
Sullivan, J. J., Jr. (M)..440 E. 23rd St., New York, N. Y.
Summers, William A.....
1613 David Whitney Bldg., Detroit 26
Summers, William S.....
1613 David Whitney Bldg., Detroit
Surbis, John P.....22277 Long Blvd., Dearborn
Sutherland, Jacob M.....662 Fisher Bldg., Detroit 2
Suwinski, Raymond H.....9243 Joseph Campau, Detroit
Swan, Lionel F.....3400 McDougall, Detroit 7
Swanson, Carl W.....936 Alter Rd., Detroit 15
Swanson, Cleary N.....
16921 James Couzens Hwy., Detroit 27
Swanson, Robert G.....936 Alter Rd., Detroit
Swartz, Fred G. Jr.....1229 David Whitney Bldg., Detroit
Sweeny, Donald N., Jr.....8445 E. Jefferson, Detroit 14
Sweeney, Francis X.....1420 San Antoine, Detroit 26
Swift, Karl L.....869 Fisher Bldg., Detroit 2
Swihart, John J.....912 Kales Bldg., Detroit
Switzer, Bertrand C.....17354 James Couzen Hwy., Detroit
Syphax, Charles S., Jr.....1819 E. Davison, Detroit
Szappanyos, B. J. (M)....2567 W. Grand Blvd., Detroit
Szejda, J. C.....3003 Harper, Detroit
Szilagyi, D. E.....14638 Stahelin St., Detroit
Szladek, F. J.....4045 W. Jefferson, Ecorse
Szmigiel, A. J.....7527 E. 7 Mile Rd., Detroit 34
Szokolai, Joseph P.....2694 Carter St., Detroit

Talbot, Frank G. (M)..19154 Westmoreland, Detroit 19
Tallant, Edward J.....14001 Greenfield, Detroit
Tamblyn, E. J.....15315 E. Jefferson, Detroit 30
Tanner, Natalia M.....8033 Twelfth St., Detroit
Tapert, Julius C.....888 Chalmers, Detroit 15
Tasker, Helen E.....76 W. Adams, Detroit
Tassie, Ralph N.....14060 Saratoga, Detroit
Tatelis, Gabriel A.....1011 E. Grand Blvd., Detroit
Tatelman, Maurice.....410 Kales Bldg., Detroit 26
Taurence, William H.....1860 Ford, Wyandotte
Taylor, Ivan B...504 Doctors Bldg., 3919 John R, Detroit
Taylor, J. L.....1566 W. Grand Blvd., Detroit
Taylor, Nelson M.....654 St. Clair, Grosse Pointe 30
Taylor, Reu Spencer (L).....1942 Clarkdale, Detroit 9
Tazzioli, Henry A.....21970 Moross Rd., Detroit 36
Tear, Malcolm J. J.....5008 Trumbull Ave., Detroit 8
Teitelbaum, Myer.....405 Kales Bldg., Detroit 26
Tenaglia, Thomas A.....9 Salliotte, Ecorse 18
Tenerowicz, Rudolph G.....2925 Lehman, Detroit 12
Terry, Willard B. G.....1151 Taylor Ave., Detroit 2
Texter, Elmer C.....7457 Gratiot Ave., Detroit 13
Thomas, Delma F.....753 Fisher Bldg., Detroit
Thompson, Arthur Lee.....6125 Scotten, Detroit

Thompson, H. O.....6014 W. Fort, Detroit 9
Thompson, W. A.....6125 Scotten, Detroit 10
Thomson, Daniel C.....2966 Biddle Ave., Wyandotte
Thornell, Harold E.....4839 Beaubien, Detroit 1
Thosteson, George C.....
1139 David Whitney Bldg., Detroit 26
Thumann, R. C., Jr.....
1757 David Whitney Bldg., Detroit 26
Thumim, Sadie.....15306 Joy Rd., Detroit
Toaz, Robert B.....13700 Woodward, Detroit 3
Tolbert, Vassal G.....3705 Hastings, Detroit 1
Tomsu, Charles L.....6170 Michigan Ave., Detroit 10
Torres, Estelle.....3985 Caniff, Detroit
Torres, Raul M., Jr.....1076 Maccabees Bldg., Detroit
Townsend, Frank M., Jr.....1551 Trumbull, Detroit 16
Trader, Kenneth N.....951 Fisher Bldg., Detroit 2
Tregenza, W. K.....18530 Grand River, Detroit
Tremain, Harold L.....106 W. Davison, Detroit
Troester, George A.....1140 Maccabees Bldg., Detroit
Trombino, James F. V.....
2567 W. Grand Blvd., Detroit 8
Trombley, Bryan....755 David Whitney Bldg., Detroit 26
Trombley, Joseph J.....19000 Puritan, Detroit 23
Truba, Paul K.....1409 Kales Bldg., Detroit 26
Truszkowski, Edward G.....3411 Evaline, Detroit 12
Trythall, S. W.....13300 Livernois, Detroit 4
Tulloch, John.....923 David Whitney Bldg., Detroit
Tupper, Roy D.....15101 W. 7 Mile Rd., Detroit 19
Turbett, Claude W. (L).....
4230 Commonwealth Ave., Detroit 8
Turcotte, Vincent J.....14015 Gratiot, Detroit 5
Turkel, Henry.....1302 Industrial Bk. Bldg., Detroit 26
Turnbull, Jack V.....22340 Michigan, Dearborn
Tuttle, William M.....307 David Whitney Bldg., Detroit
Tuynman, Peter E.....15865 Wyoming, Detroit 21
Ujda, Chester J.....3106 Washington, Wayne
Ulrich, Henry L.....
1540 Torrey Rd., Grosse Pointe Woods 36
Ulrich, Willis H.....22365 Grand River, Detroit
Umphrey, Clarence E.....
15300 W. McNichols Rd., Detroit 35
Usher, William Kay.....15605 Kercheval, Detroit 30

Vale, C. F. (R).....2615 Via Tuscany, Winter Park, Fla.
Van Becelaere, L. H.....10 Bourassa, Ecorse
VandenBerg, Henry J., Jr.....
816 David Whitney Bldg., Detroit 26
Van Eck, James E.....9165 Whittier, Detroit 24
Van Hoek, Donald E.....
2001 Lancaster, Grosse Pointe Woods 30
Van Hoey, Alger F.....
19154 James Couzens Hwy., Detroit 21
Van Raaphorst, L. F.....1306 Kales Bldg., Detroit 26
Van Riper, Steven L.....1490 Iroquois, Detroit 14
Vardon, Edward M.....12897 Woodward Ave., Detroit 3
Vasu, V. O.....4829 Woodward, Detroit 1
Veling, William F.....1060 Fisher Bldg., Detroit 2
Vogel, Hyman A.....29901 Ford Rd., Garden City
Vokes, Milton D.....10182 Gratiot Ave., Detroit
Vonder Heide, E. C.....17190 Strathmore, Detroit 21
Vossler, A. E.....825 David Whitney Bldg., Detroit 26

Waddington, Jos. E. G. (E).....
3818 Northwestern, Detroit 6
Waggoner, C. Stanley.....
541 David Whitney Bldg., Detroit 26
Waggoner, Lyle G...404 David Whitney Bldg., Detroit 26
Wainger, Max J.....
1012 David Broderick Tower, Detroit 26
Wainstock, Michael A.....
1508 David Broderick Tower, Detroit 26
Wakeman, Everal M.....22276 Garrison, Dearborn
Waldbott, George L.....10 Peterboro, Detroit 1
Walker, George L.....526 Claremont, Dearborn
Walker, J. Paul.....1211 Bishop Rd., Grosse Pointe
Walker, Roger V.....
1255 David Whitney Bldg., Detroit 26
Walkowiak, Robert G.....716 Kales Bldg., Detroit 26
Wallace, S. Willard.....7815 E. Jefferson, Detroit 14
Walls, Arch.....17201 W. McNichols Rd., Detroit
Walser, Howard Carleton.....566 Fisher Bldg., Detroit 2
Walsh, Francis P.....474 Fisher Bldg., Detroit 2
Walter, Arthur W.....14201 Rutland, Detroit 27
Walter, Floyd J.....19600 Grand River, Detroit 23
Walters, Albert G.....11078 Gratiot Ave., Detroit 5
Waltz, Paul J.....16127 Woodward Ave., Detroit 3
Wangner, William F.....7220 Gratiot Ave., Detroit 13
Ward, Clyde H.....14834 Coyle, Detroit
Warden, Horace F. W.....8011 W. Vernor Hwy. Detroit 9
Warner, J. F.....7850 E. Jefferson, Detroit 14
Warner, P. L.....10314 Puritan, Detroit 21
Warren, Irving A.....
1406 David Broderick Tower, Detroit 26
Warren, Wadsworth.....
1144 David Whitney Bldg., Detroit 26
Wassermann, Lewis C.....562 Maccabees Bldg., Detroit 26
Waszak, Charles J.....2501 W. Grand Blvd., Detroit 8
Watson, Douglas J.....15101 Plymouth Rd., Detroit
Watson, Harwood G.....935 S. Military, Dearborn
Watson, J. Edwin.....2536 W. Grand Blvd., Detroit 8
Watts, Frederick B.....16321 Mack Ave., Detroit
Watts, J. C. (A).....7360 Twelfth St., Detroit 6
Watts, John C.....7360 Twelfth St., Detroit
Watts, Joseph.....724 Maccabees Bldg., Detroit
Wayne, Morris A.....15930 Livernois, Detroit 21
Weaver, Clarence E.....113 Martin Place, Detroit 1
Weaver, Delmar F.....571 Fisher Bldg., Detroit
Weber, Karl W.....16400 E. Warren, Detroit 24
Webster, John E.....840 David Whitney Bldg., Detroit 26
Weed, Milton R.....1997 E. Grand Blvd., Detroit 11
Wehenkel, Albert M. (L).....7356 12th St., Detroit 6
Weidner, J. H.....c/o Dearborn Engineering Laboratory,
21500 Oakwood, Dearborn
Weiner, Maurice B.....1114 Maccabees Bldg., Detroit 2
Weingarden, David.....13240 Vassar Drive, Detroit
Weinstein, Jacob.....4237 Grand River Ave., Detroit 8
Weisberg, A. Allen.....20 W. Seven Mile Rd., Detroit
Weisberg, Harry.....618 Maccabees Bldg., Detroit 2
Weisberg, Jacob.....618 Maccabees Bldg., Detroit 2
Weisenthal, Irvin.....5764 Woodward, Detroit 2
Weiser, Frank A.....4162 John R, Detroit
Weiss, Casimir P.....10040 Joseph Campau, Detroit 12
Weiss, J. G.....2237 W. Grand Blvd., Detroit 8
Welch, John H.....18550 W. Outer Drive, Dearborn 7
Welch, W. K. (M).....
Letterman Army Hosp., San Francisco, Calif.
Weller, Charles N.....730 Watervale Rd., Arcadia
Wells, Martha L.....760 Fisher Bldg., Detroit
Weltman, Carl G.....
1701 David Whitney Bldg., Detroit 26
Wendel, Jacob S.....
744 David Whitney Bldg., Detroit 26
Wenzel, Jacob F.....1006 Kales Bldg., Detroit 26
Werle, Peter Paul.....1420 St. Antoine, Detroit 26
West, George A.....6310 Mack Ave., Detroit
West, Howard Gaige.....12739 Puritan, Detroit 27
Weston, Bernard.....3200 Tyler, Detroit 6
Weston, Earl E.....18101 James Couzens Hwy., Detroit 21
Weston, Horace L.....703 Mutual Bldg., Detroit 26
Weston, Jean K.....4500 Burns, Detroit
Weyher, Russell F.....5383 Oakman Blvd., Detroit 4
Whalen, Neil J.....1515 David Whitney Bldg., Detroit 26
Wharton, Thomas V.....1809 Oak St., Wyandotte
Wheeler, S. C.....19207 Schaefer, Detroit 21
Whelan, Joseph L.....28 W. Adams Ave., Detroit 26
Whinnery, Randall A.....752 Fisher Bldg., Detroit 2
Whitcomb, C. E.....21714 Fenkell Ave., Detroit 23
White, Donald H.....1580 W. Fort St., Lincoln Park
White, Milton W.....2329 E. Grand Blvd., Detroit 11
White, Prosper D.....66 Tuxedo, Highland Park
White, Theodore M.....7159 Michigan Ave., Detroit 10
Whitehead, Leston S.....Henry Ford Hosp., Detroit 2
Whitehead, Walter K.....
1129 David Whitney Bldg., Detroit 26
Whiteley, Robert K.....
541-3 David Whitney Bldg., Detroit 26
Whitney, Elmer L.....Henry Ford Hosp., Detroit 2
Whitney, Rex E.....5525 W. Chicago Blvd., Detroit 4

Whittaker, Alfred H.....1427 E. Jefferson, Detroit 7
Wiant, John L.....309 Professional Bldg., Detroit
Wiechowski, Henry E.....10345 Joseph Campau, Detroit
Wiener, Israel.....13011 W. McNichols Rd., Detroit 35
Wiener, Morton.....612 Kales Bldg., Detroit 26
Wietersen, Fred K...260 Manor Rd., Rte. 2, Birmingham
Wight, Fred B.....1048 David Whitney Bldg., Detroit 26
Wikiera, Edward S.....13181 Littlefield, Detroit 27
Wilcox, L. F.....10 Peterboro, Detroit 1
Wiley, William M.....17041 Waveney, Detroit 24
Wilhelm, Seymour K.....3925 Joy Rd., Detroit 6
Wilkinson, A. P.....974 Fisher Bldg., Detroit 2
Williams, Clarence J.....
15324 E. Jefferson, Grosse Pointe Park 30
Williams, Delford G. Jr.....8540 Twelfth St., Detroit
Williamson, J. G. (A).....3660 McKinley, Dearborn
Wilner, I. A.....17239 W. McNichols Rd., Detroit 19
Wilson, Andrew G.....4741 Spokane, Detroit
Wilson, Gerald A.....4741 Spokane, Detroit 4
Wilson, M. C.....15439 Harper, Detroit 24
Wilson, C. Stuart.....10 Peterboro, Detroit 1
Wilson, Walter J. (E).....
749-753 David Whitney Bldg., Detroit 26
Wilson, Walter J. Jr.....749 David Whitney Bldg., Detroit
Winnick, Laurence C.....19120 Snowden, Detroit
Winton, George J.....1007 David Stott Bldg., Detroit 26
Wise, Robert K.....15801 W. McNichols, Detroit 35
Wishropp, E. A.....227 Kenwood Court, Grosse Pointe
Wissman, H. C.....6356 W. Fort, Detroit 9
Wittenberg, Arthur A.....7101 W. Chicago, Detroit
Wittenberg, Samson S.....934 Maccabees Bldg., Detroit 2
Wittenberg, Sydney S.....4400 Livernois, Detroit 10
Witter, Frank C. (L).....344 Glendale Ave., Detroit 3
Witter, Joseph A.....344 Glendale, Detroit 3
Witus, Carl.....18412 Mack Ave., Detroit 24
Witus, Morris.....9036 Dexter Blvd., Detroit 6
Wolfe, Max O.....7-260 General Motors Bldg., Detroit 2
Wollank, Helen Wilson.....15324 E. Jefferson, Detroit 30
Wollenberg, R. A. C. (L).....
938 David Whitney Bldg., Detroit 26
Wood, A. L.....2018 N. Telegraph, Dearborn
Wood, Kenneth A.....3919 John R, Detroit 1
Wood, Wilford C.....463 Fisher Bldg., Detroit
Woodworth, W. P. (L)....17387 Quincy Ave., Detroit 21
Woolfenden, Joseph B. (M)....16321 Mack Ave., Detroit
Worzniak, Joseph J.....2312 Biddle St., Wyandotte
Wreggit, Winston R.....79 Highland Ave., Highland Pk. 3
Wright, C. H. (A).....Harlem Hospital, N. Y. 30, N. Y.
Wright, Lance S. Jr. (M).....728 S. Main St., Plymouth
Wruble, Joseph.....411 Seldon, Detroit
Wunsch, Richard E.....7815 E. Jefferson, Detroit 14
Yamasaki, Ken.....3465 Chatsworth, Detroit 24
Yarrows, Morton.....455 Medbury, Detroit
Yates, Arthur J. W.....8045 E. Jefferson, Detroit
Yates, J. Lewis.....Henry Ford Hosp., Detroit
Yesayian, H. G.....609 Kales Bldg., Detroit
Yetzer, William J.....760 Fisher Bldg., Detroit
Yott, William J.....5234 Bishop, Detroit 24
Young, Donald A.....14807 W. McNichols, Detroit
Young, Donald C.....1151 Taylor Ave., Detroit 2
Young, Lloyd B.....857 Fisher Bldg., Detroit 2
Young, Viola M.....10 Peterboro, Detroit 1
Young, Watson A.....3508 Harrison Ave., Inkster
Zabinski, Edward J.....19036 Van Dyke, Detroit 12
Zackheim, Herschel S.....22265 Garrison, Dearborn
Zawacki, Sigmund....8830 W. McNichols Rd., Detroit 21
Zawadzki, E. S.....14961 Piedmont Ave., Detroit
Zbikowski, Joseph..Wayne County General Hosp., Eloise
Zbudowski, Myron R.....2758 Belmont, Hamtramck
Zemens, Joseph L.....1580 E. Grand Blvd., Detroit 32
Ziegler, Robert F.....Henry Ford Hosp., Detroit
Zielinski, Charles J.....18900 W. Warren, Detroit
Zinn, George H.....641 David Whitney Bldg., Detroit 26
Zinterhofer, John..27621 Santa Barbara Dr., Birmingham
Zolliker, Margaret Z.....20390 Harper Ave., Detroit
Zonnis, M. E.....1064 Fisher Bldg., Detroit 2
Zuelzer, Wolfgang W.....Children's Hosp., Detroit
Zukowski, Henry J.....
1916 Manchester Blvd., Grosse Pointe Woods 30
Zukowski, Sigmund A.....6626 Van Dyke, Detroit 13

WEXFORD-MISSAUKEE COUNTIES

Cardinal, Thomas H.....419 Stimson St., Cadillac
Daugharty, Robert V.....726 E. Division St., Cadillac
Holm, Augustus (L).....2525 9th Ave., Moline, Ill.
Inman, J. C.....Lake City
Lomman, Ralph G.....Manton
Merritt, C. E.....Manton
Moon, William W.....124 E. Cass St., Cadillac
Moore, Gregory P.....734 E. Division St., Cadillac
Murphy, M. R.....Granite Bldg., Cadillac
Paye, Philip H.....311 Evart, Cadillac
Posthuma, Millard M.....124 E. Cass St., Cadillac
Purdy, Calvin S.....Buckley
Smith, Wallace J.....East Harris St., Cadillac
Stokes, William H.....Lake City
Tornberg, Gordon C.....124 E. Cass St., Cadillac

HONORARY MEMBERS

Brake, D. Hale....State Treasurer, State Capitol, Lansing
Cline, John W.....3467 Pacific Ave., San Francisco, Calif.
deKruif, Paul, Ph.D.....Wake Robin, Holland
Kahlke, Charles E.....Benton Harbor
Potter, LeRoy A.....Mich. Dept. of Health, Lansing
Tompkins, C. E.....680 Pipestone, Benton Harbor
Upjohn, Lawrence N.....
Upjohn Co., 301 Henrietta St., Kalamazoo

Woman's Auxiliary-MSMS

Roster, 1953

ALLEGAN COUNTY

Brown, Mrs. Lewis F.....Otsego
Brunson, Mrs. E. T.....Ganges
Chase, Mrs. Walter E.....Martin
Clark, Mrs. James.....Fennville
Corkill, Mrs. C. C.....Douglas
Mahan, Mrs. J. E.....Allegan
Mitchell, Mrs. A. B.....Allegan
Rickert, Mrs. Ruth.....Allegan
VanDerKolk, Mrs. B.....Hopkins

ALPENA-ALCONA-PRESQUE ISLE COUNTIES

Arscott, Mrs. Edward....Roger City
Burkholder, Mrs. H.....Alpena
Finch, Mrs. Donald.....Onaway
Heir, Mrs. E. A.....Alpena
Hoak, Mrs. Carl G.....Alpena
Jackson, Mrs. W. F.....Roger City
Kessler, Mrs. H.....Alpena
Leopard, Mrs. Jack.....Alpena
Ries, Mrs. Robert C.....Rogers City
Riker, Mrs. J. L.....Alpena
Rowell, Mrs. W. J.....Alpena
Spens, Mrs. James.....Alpena
Wagoner, Mrs. Darwin.....Lincoln

BAY COUNTY

Alcorn, Mrs. Kent.....Bay City
Alcorn, Mrs. Marshall.....Bay City
Allen, Mrs. Arthur D.....Bay City
Andrews, Mrs. F. T.....Bay City
Asline, Mrs. J. N.....Bay City
Baird, Mrs. Fred.....Bay City
Baird, Mrs. Thomas.....Bay City
Bowman, Mrs. David A...Bay City
Brown, Mrs. G. M.....Bay City
Campbell, Mrs. John.....Bay City
Chapin, Mrs. Fred.....Bay City
Connelly, Mrs. C. D.....Essexville
Cook, Mrs. Hugh.....Bay City
Cosens, Mrs. Stanley A.....Bay City
Criswell, Mrs. Robert.....Bay City
Crissey, Mrs. Robert H.....Bay City
Dardas, Mrs. M. J.....Bay City
De Waele, Mrs. Paul.....Bay City
Drummond, Mrs. Fred..Kawkawlin
Dumond, Mrs. Van H.....Bay City
Fisher, Mrs. Robert.....Bay City
Foster, Mrs. L. F.....Bay City
Freel, Mrs. John.....Bay City
Gale, Mrs. H. M.....Bay City
Gamble, Mrs. W. G.....Bay City
Gunn, Mrs. Robert.....Bay City
Hagelshaw, Mrs. G. L.....Bay City
Heuser, Mrs. H. H.....Bay City
Horowitz, Mrs. S. F.....Bay City
Howland, Mrs. Walter..Pinconning
Huckins, Mrs. E. S.....Bay City
Huckins, Mrs. Roger.....Bay City
Husted, Mrs. F. Pitkin.....Bay City
Jacoby, Mrs. A. H.....Bay City
Jens, Mrs. Otto.....Essexville
Johnson, Mrs. Orlen.....Bay City
Jones, Mrs. Culver.....Essexville
Knobloch, Mrs. Howard..Bay City
MacPhail, Mrs. Jos.....Norfolk, Va.
MacRae, Mrs. L. D.....Bay City
McDonnell, Mrs. W. R...Pinconning
McEwan, Mrs. J. H.....Bay City
McLurg, Mrs. John.....Bay City
Medvezky, Mrs. M. J.....Bay City
Miller, Mrs. E. C.....Bay City
Moore, Mrs. G. W.....Bay City
Moore, Mrs. Neal.....Bay City
Mosier, Mrs. D. J.....Bay City
Pearson, Mrs. S. M.....Bay City
Perkins, Mrs. Roy.....Bay City
Reuter, Mrs. C. W.....Bay City
Ruggles, Mrs. F. E.....Bay City
Shafer, Mrs. Harold C.....Bay City
Slattery, Mrs. Matthew....Bay City
Smith, Mrs. J. C.....Bay City
Staley, Mrs. Hugh.....Omer
Stinson, Mrs. Walter.....Bay City
Swantek, Mrs. Chas. M...Bay City
Switzer, Mrs. L. W.....Bay City
Tarter, Mrs. Clyde.....Bay City
Taylor, Mrs. Robert.....Bay City
Urmston, Mrs. P. R.....Bay City
Vail, Mrs. Harry F.....Bay City
Wilcox, Mrs. James.....Bay City
Wilson, Mrs. T. G.....Bay City
Wittwer, Mrs. Ernest.....Bay City
Woodburne, Mrs. H. L...Essexville
Wright, Mrs. Thomas.....Bay City
Zaremba, Mrs. A. J.....Bay City
Ziliak, Mrs. A. L.....Bay City

BERRIEN COUNTY

Bailey, Mrs. John....Benton Harbor
Bronfenbrenner, Mrs. J...St. Joseph
Butler, Mrs. William J.....St. Joseph
Cawthorne, Mrs. H. J.....
Benton Harbor
Conklin, Mrs. F.....Berrien Springs
Conybeare, Mrs. R. C.....
Benton Harbor
Cooper, Mrs. W. L.....St. Joseph
Cowdery, Mrs. K. H.....St. Joseph
Crowell, Mrs. Richard C.....
St. Joseph
Elliott, Mrs. J. C.....Buchanan
Emery, Mrs. Clayton S...St. Joseph
Emery, Mrs. William....St. Joseph
Fattic, Mrs. G. R.....Niles
Feeley, Mrs. Marshall....St. Joseph
Galles, Mrs. James..Benton Harbor
Garrett, Mrs. E. L.....Niles
Hassan, Mrs. Kent.....Buchanan
Hayes, Mrs. T. P.....Niles
Hershey, Mrs. Noel J.....Niles
Irgens, Mrs. E. R.....St. Joseph
Johnston, Mrs. W...Benton Harbor
Kennedy, Mrs. F. A.....
Benton Harbor
King, Mrs. B. B.....Benton Harbor
Klos, Mrs. Henry.....St. Joseph
Langraf, Mrs. Robert L.....Niles
Lindenfeld, Mrs. Fred H.....Niles
Lininger, Mrs. Richard.....
Benton Harbor
Manning, Mrs. John.....St. Joseph
Moore, Mrs. Scott.....Niles
Ozeran, Mrs. Chas...Benton Harbor
Parker, Mrs. L. B...Berrien Springs
Porter, Mrs. Charles.....
Benton Harbor
Pritchard, Mrs. H. M.....Niles
Ray, Mrs. Dean.....Benton Harbor
Reagan, Mrs. Robert.....
Benton Harbor
Rice, Mrs. Franklyn, Jr.....Niles
Richmond, Mrs. Dean....St. Joseph
Ruth, Mrs. J. Griswold.....
Benton Harbor
Skinner, Mrs. James.....St. Joseph
Sowers, Mrs. B. F...Benton Harbor
Strayer, Mrs. J. C.....Buchanan
Strayer, Mrs. John W.....Niles
Strick, Mrs. M. H...Benton Harbor
Swingle, Mrs. Alvin J.....
Benton Harbor
Thorup, Mrs. Donald W.....
Benton Harbor
Vastine, Mrs. R. J.....Buchanan
Westervelt, Herbert O.....
Benton Harbor
Winegar, Mrs. Alvin C.....
Benton Harbor
Woodford, Mrs. H. E.....
Benton Harbor

BRANCH COUNTY

Aldrich, Mrs. N. S.....Coldwater
Andrews, Mrs. Frank A.....Coldwater
Bailey, Mrs. J. E.....Coldwater
Beck, Mrs. P. C.....Bronson
Culver, Mrs. Dean T.....Coldwater
Culver, Mrs. Bert W.....Coldwater
Fraser, Mrs. Robert J.....Coldwater
Gist, Mrs. L. I.....Coldwater
Gomley, Mrs. Henry C.....Bronson
Harris, Mrs. D. M.....Coldwater
Heffelfinger, Mrs. J. C...Coldwater
Leitch, Mrs. Robert M.....Union City
McGinnis, Mrs. H. J.....Coldwater
Mooi, Mrs. H. Roy.....Coldwater
Moss, Mrs. H. L.....Coldwater
Olmsted, Kenneth Lader.....Coldwater
Rennel, Mrs. Edwin J.....Coldwater
Rees, Mrs. Kendall B...Coldwater
Thomas, Mrs. James A...Coldwater
Wade, Mrs. Robert L.....Coldwater
Walton, Mrs. Nathan J.....Quincy
Weidner, Mrs. Harold R.....Coldwater

CALHOUN COUNTY

Amos, Mrs. N. H.....Battle Creek
Barden, Mrs. Stuart....Battle Creek
Baribeau, Mrs. R. H...Battle Creek
Becker, Mrs. H. F.....Battle Creek
Beuker, Mrs. Herman.....Marshall
Bodine, Mrs. H. R.....Battle Creek
Bonifer, Mrs. P. P.....Battle Creek
Brainard, Mrs. C. W...Battle Creek
Brown, Mrs. Robert W.....Battle Creek
Campbell, Mrs. R. J...Battle Creek
Capron, Mrs. M. J...Battle Creek
Chandler, Mrs. Edward.....Battle Creek
Chynoweth, Mrs. W. R.....Battle Creek
Diamante, Mrs. Paul..Battle Creek
Fraser, Mrs. H. H.....Battle Creek
Graubner, Mrs. F. L.....Marshall
Hansen, Mrs. H. C.....Battle Creek
Haughey, Mrs. Wilfred.....Hickory Corner
Hibbs, Mrs. D. K.....Battle Creek
Hollands, Mrs. R. A.....Battle Creek
Holtom, Mrs. B. G...Battle Creek
Hubly, Mrs. James.....Battle Creek
Humphrey, Mrs. A. A.....Battle Creek
Jeffrey Mrs. J. R.....Battle Creek
Keagle, Mrs. L. R.....Battle Creek
Kelleher, Mrs. Geo.....Battle Creek
Kinde, Mrs. M. R.....Battle Creek
Kingsley, Mrs. P. C.....Battle Creek
Kolvoord, Mrs. Theo.....Battle Creek
Lam, Mrs. F. L.....Battle Creek
Lancaster, Mrs. Y.....Battle Creek
Leitch, Mrs. Robert....Union City
Lowe, Mrs. K. H.....Gull Lake
Lowe, Mrs. S. T.....Battle Creek
McCuaid, Mrs. Alfred.....Battle Creek
Marino, Mrs. S. G.....Battle Creek
Meister, Mrs. F. O.....Battle Creek
Melges, Mrs. F. J.....Battle Creek
Morrison, Mrs. D. B...Battle Creek
Patrick, Mrs. G. T.....Battle Creek
Pearson, Mrs. D. J.....Battle Creek
Robbert, Mrs. John....Battle Creek
Robbins, Mrs. Hugh....Battle Creek
Rosenfeld, Mrs. J. E...Battle Creek
Royer, Mrs. C. W.....Battle Creek
Schwarz, Mrs. F. W.....Battle Creek
Sharp, Mrs. W. T.....Battle Creek
Shellenberger, Mrs. H. M.....Marshall
Shipp, Mrs. L. P.....Battle Creek
Simpson, Mrs. R. S.....Battle Creek
Slagle, Mrs. G. W.....Battle Creek
Stadle, Mrs. W. H.....Battle Creek
Stiefel, Mrs. R. A.....Battle Creek
Swartz, Mrs. Geo.....Battle Creek
Tazelaar, Mrs. Myron....Marshall
Verity, Mrs. L. E.....Battle Creek
Walters, Mrs. J. F.....Battle Creek
Wenche, Mrs. C. G.....Battle Creek
Winslow, Mrs. S. B.....Battle Creek
Worgess, Mrs. D. R...Battle Creek
Zheutlin, Mrs. Bertram.....Battle Creek
Zindler, Mrs. G. A.....Bellevue

Associate Members

Berghorst, Mrs. John..Battle Creek
Herman, Mrs. L.....Battle Creek
Jones, Mrs. Aubrey....Battle Creek
LaFrance, Mrs. S. A...Battle Creek
Yannitelli, Mrs. S. A...Battle Creek

Honorary Members

Allen, Mrs. H. R.....Battle Creek
Byland, Mrs. N. D.....Battle Creek
Kingsley, Mrs. A. F.....Battle Creek
Lowe, Mrs. H. M.....Battle Creek
Martin, Mrs. W. F.....Battle Creek
Royer, Mrs. W. A.....Battle Creek
VanCamp, Mrs. E.....Battle Creek
Walters, Mrs. F. R.....Battle Creek

DELTA-SCHOOLCRAFT COUNTIES

Anderson, Mrs. Francis....Escanaba
Benson, Mrs. G. W.....Escanaba
Bernier, Mrs. A. B.....Manistique
Boyce, Mrs. D. H.....Escanaba
Carlton, Mrs. Arthur.....Escanaba
Defnet, Mrs. H. G.....Escanaba
Dehlin, Mrs. J. R.....Gladstone
Frenn, N. T.....Bark River
Fyvie, Mrs. Jas. H.....Manistique
Groos, Mrs. Louis.....Escanaba
Hult, Mrs. Otto.....Gladstone
LeMire, Mrs. Donald.....Escanaba
LeMire, Mrs. Wm.....Escanaba
Lindquist, Mrs. Norman..Escanaba
McInerney, Mrs. Thomas.....Escanaba
Miller, Mrs. A. H.....Gladstone
Olson, Mrs. C.....Gladstone
Ryde, Mrs. R. E.....Escanaba
Van Arsdale, Mrs. Wm. L.....Manistique
Walch, Mrs. John J.....Escanaba
Wehner, Mrs. Merle D.....Manistique

DICKINSON-IRON COUNTIES

Addison, Mrs. Earl R.....Crystal Falls
Alexander, Mrs. Wm. H.....Iron Mountain
Anderson, Mrs. D. T.....Kingsford
Boyce, Mrs. George.....Iron Mountain
Cooper, Mrs. C. A.....Stambaugh
Fiedling, Mrs. Wm.....Vulcan
Huron, Mrs. W. H.....Iron Mountain
Irvine, Mrs. L. E.....Iron River
McEachran, Mrs. H. D.....Iron Mountain
Menzies, Mrs. Clifford.....Iron Mountain
Newkirk, Mrs. H. A.....Iron Mountain
Palm, Mrs. E. Theodore.....Crystal Falls
Retallack, Mrs. R. C.....Iron River
Schumtzler, Mrs. W. A...Kingsford
Schroeder, Mrs. John.....Iron Mountain
Smith, Mrs. Donald R.....Iron Mountain
Steinke, Mrs. C. G.....Iron Mountain

EATON COUNTY

Arner, Mrs. Fred L.....Bellevue
Brown, Mrs. B. Phillip..Charlotte
Carothers, Mrs. D. J.....Charlotte
DeLand, Mrs. C. L.....Bellevue
Engle, Mrs. Paul.....Olivet
Goff, Mrs. Sidney B...Eaton Rapids
Hannah, Mrs. Harry W...Charlotte
Meinke, Mrs. Albert..Eaton Rapids
Myers, Mrs. A. W.....Porterville
Sevener, Mrs. Lester G.....Charlotte
Stimson, Mrs. Chas. A.....Eaton Rapids
VanArk, Mrs. Bert....Eaton Rapids
VanArk, Mrs. Herman F.....Eaton Rapids
Willets. Mrs. Clayton O...Charlotte

GENESEE COUNTY

Adams, Mrs. Chester..Grand Blanc
Adams, Mrs. Burnell.....Flint
Anderson, Mrs. H. H.....Mt. Morris
Anthony, Mrs. George.....Flint
Backus, Mrs. Glenn.....Flint
Baird, Mrs. C.....Flint
Barbour, Mrs. Fleming.....Flint
Baske, Mrs. Franklin.....Flint
Bateman, Mrs. L. G.....Flint
Benson, Mrs. John, Jr.....Flint
Bernstein, Mrs. Eli.....Flint
Beyer, Mrs. Damon.....Clio
Beyer, Mrs. George.....Clio
Bird, Mrs. W. G.....Flint
Bishop, Mrs. D. L.....Flint
Bogart, Mrs. Leon.....Flint
Boles, Mrs. Wm.....Flint
Bonathan, Mrs. A. T.....Flint
Branch, Mrs. Hira.....Flint
Bruce, Mrs. W.....Swartz Creek
Brasie, Mrs. Don.....Flint
Briggs, Mrs. Guy.....Flint
Bryant, Mrs. Donald.....Flint
Buchanan, Mrs. Wm.....Fenton
Chambers, Mrs. M. S.....Flint
Collins, Mrs. James.....Flint
Connell, Mrs. J. T.....Flint
Conover, Mrs. George.....Flint
Conover, Mrs. McClellan.....Flint
Cook, Mrs. Henry.....Flint
Credille, Mrs. Barney.....Flint
Currey, Mrs. G.....Flint
Curtin, Mrs. John.....Flint
Cutler, Mrs. Campbell.....Flint
Dawson, Mrs. R. E.....Flint
Del-Zingro, Mrs. Nicholas..Davison
Dickstein, Mrs. Bernard.....Flint
Dorsey, Mrs. Philip.....Flushing
Drewyer, Mrs. Glenn.....
Swartz Creek
Eickhorst, Mrs. Thomas.....Flint
Elliott, Mrs. H. B.....Flint
Farhat, Mrs. Maynard.....Flint
Fee, Mrs. Manson.....Flint
Finkelstein, Mrs. T.....Flint
Flynn, Mrs. Southard.....Flint
Gleason, Mrs. N. A.....Flint
Gorne, Mrs. S. S.....Flint
Grady, Mrs. Donald.....Flint
Griffin, Mrs. Ernest.....Flint
Grover, Mrs. H. F.....Flint
Gundry, Mrs. George..Grand Blanc
Gutow, Mrs. J. J.....Flint
Hackley, Mrs. Richard.....Flint
Hague, Mrs. Robert.....Flushing
Hamilton, Mrs. A. J.....Fenton
Harper, Mrs. Mrs. A. W.....Flint
Harper, Mrs. Homer.....Flint
Hiscock, Mrs. Harold.....Flint
Hooper, Mrs. Kendall.....Flint
Hubbard, Mrs. Wm.....Flint
Hufton, Mrs. W. L.....Flint
Jernstad, Mrs. Robert.....Flushing
Johnson, Mrs. Frank.....Flint
Johnson, Mrs. Raymond.....Flint
Judd, Mrs. Alvin.....Davison
Kaleta, Mrs. Edward J.....Flint
Kaufman, Mrs. L. D.....Flint
King, Mrs. William.....Flint
Knapp, Mrs. Don.....Flint
Knapp, Mrs. Wm.....Flint
Kretchmar, Mrs. Arthur.....Flint
Kurtz, Mrs. John.....Flint
Limbach, Mrs. David.....Fenton
Livesay, Mrs. Jackson.....Flint
Lyttle, Mrs. Sydney.....Flint
MacGregor, Mrs. Delbert.....Flint
Macksood, Mrs. Joseph.....Flint
McLeod, Mrs. Kenneth.....Flint
McTaggart, Mrs. David.....Flint
Minor, Mrs. F. B. (widow)....Flint
Miltich, Mrs. Anthony.....Flint
Moore, Mrs. Kenneth.....Flint
Morrissey, Mrs. Vaughan.....Flint
Mosier, Mrs. Edward.....Flint
Neiswander, Mrs. Paul.....Flint
Odle, Mrs. Ira.....Flint
Orr, Mrs. Walter.....Fenton
Osher, Mrs. Seymour.....Flint
Phillips, Mrs. Robert.....Flint
Preston, Mrs. Otto.....Flint
Rapport, Mrs. Richard.....Flint
Rawlings, Mrs. J. Mott.....Flint
Reeder, Mrs. F. E.....Flint
Richeson, Mrs. Verne.....Flint
Rowe, Mrs. John.....Flint
Rulney, Mrs. Max.....Flint
Rundles, Mrs. Walter Z., Jr.....
Flint
Sandberg, Mrs. Russell.....Flint
Schultz, Mrs. J. S.....Flint
Scavarda, Mrs. Charles.....Flint
Schiff, Mrs. Benton.....Flint
Schultz, Mrs. J. S.....Flint
Schwartz, Mrs. John.....Flint
Shantz, Mrs. Leighton.....Flint
Sheeran, Mrs. Dan.....Flint
Shipman, Mrs. Charles.....Flint
Smith, Mrs. D. C.....Flint
Smith, Mrs. Eugene.....Flint
Smith, Mrs. M. J.....Flint
Sniderman, Mrs. Ben.....Flint
Sparks, Mrs. Harvey.....Flint
Steinman, Mrs. Floyd.....Flint
Stevens, Mrs. Philip K.....Flint
Stevenson, Mrs. Wm.....Flint
Stroup, Mrs. Clayton.....Flint
Thompson, Mrs. Alvin.....Flint
Thompson, Mrs. Jack.....Flint
Tofteland, Mrs. Elmer.....Flint
Tuuri, Mrs. Arthur.....Flint
Van Horn, Mrs. Ray.....Flint
Varney, Mrs. Howard.....Flint
Vary, Mrs. Edwin.....Flint
Ware, Mrs. Frank.....Flint
Wark, Mrs. D. R.....Flint
Wentworth, Mrs. John.....Flint
White, Mrs. Herbert T.....Flint
Williams, Mrs. Wm...Grand Blanc
Willoughby, Mrs. Gordon.....Flint
Willoughby, Mrs. L. L.....Flint
Wills, Mrs. T. W.....Flint
Winchester, Mrs. Walter.....Flint
Woughter, Mrs. Harold.....Flint
Wright, Mrs. Donald.....Flint

GRAND TRAVERSE-LEELANAU-BENZIE COUNTIES

Beall, Mrs. J. G.....Traverse City
Behan, Mrs. G.....Traverse City
Bolan, Mrs. E. J.....Suttons Bay
Brownson, Mrs. Jay J.....Kingsley
Brownson, Mrs. Kneale M.....
Traverse City
Bushong, Mrs. B. B...Traverse City
Carrow, Mrs. Fleming.....
Traverse City
Clark, Mrs. Charles D.....
Traverse City
Duiker, Mrs. H.....Traverse City
Ellis, Mrs. Claude.....Sutton Bay
Gallagher, Mrs. Wm.....
Traverse City
Haberlein, Mrs. Chas.....
Traverse City
Hall, Mrs. J. W.....Traverse City
Hamilton, Mrs. Earl..Traverse City
Huene, Mrs. Nevin....Traverse City
Hyslop, Mrs. William.....
Traverse City
Kyselka, Mrs. Harry..Traverse City
Lawton, Mrs. F. P.....Traverse City
Lossman, Mrs. Robert.....
Williamsburg
Miller, Mrs. C. S.....Traverse City
Milliken, Mrs. John..Traverse City
Nickels, Mrs. M. M...Traverse City
Noyes, Mrs. Guy.....Traverse City
Osterlin, Mrs. Mark..Traverse City
Pike, Mrs. Donald....Traverse City
Power, Mrs. Frank....Traverse City
Salon, Mrs. D.....Traverse City
Thirlby, Mrs. E. L.....Traverse City
Thirlby, Mrs. Richard.....
Traverse City
Weih, Mrs. J. E.....Acme
Weitz, Mrs. Harry....Traverse City
Wilcox, Mrs. Paul H.....
Traverse City
Zielke, Mrs. I. H.....Traverse City
Zimmerman, Mrs. J. C.....
Traverse City

GRATIOT-ISABELLA-CLARE COUNTIES

Barstow, Mrs. W. E.....St. Louis
Eldredge, Mrs. J.....Alma
Chamberlain, Mrs. R. W.....
Mt. Pleasant
Hall, Mrs. Robt.....Mt. Pleasant
Graham, Mrs. B. J.....Alma
Hobbs, Mrs. D.....St. Louis
Hoogerland, Mrs. C. L.....Alma
Juhnke, Mrs. L. W.....Mt. Pleasant
McArthur, Mrs. Stewart C...Clare
Oldham, Mrs. E. S.....Breckenridge
Ringer, Mrs. P.,.....Mt. Pleasant
Rottschafer, Mrs. John L.....Alma
Silvert, Mrs. Pascha.....Vestaburg
Waggoner, Mrs. R. L.....St. Louis
Wilcox, Mrs. R.....Alma

HOUGHTON-BARAGA-KEWEENAW COUNTIES

Aldrich, Mrs. A. B.....Hancock
Aldrich, Mrs. A. D.....Chassell
Aldrich, Mrs. L. C.....Houghton
Brewington, Mrs. G. F...Mohawk
Burke, Mrs. J. J.....Hubbell
Hillmer, Mrs. R. E.....Painesdale
Hoskins, Mrs. Frederick....Laurium
Janis, Mrs. A. F.....Hancock
King, Mrs. S.....Hancock
Kolb, Mrs. F. E.....Calumet
LaBine, Mrs. A.....Houghton
Larson, Mrs. F.....Houghton
Lepisto, Mrs. V.....Laurium
Levine, Mrs. S.....Houghton
Manthei, Mrs. W. A...Lake Linden
Murphy, Mrs. P. J.....Calumet
Potter, Mrs. E.....L'Anse
Repolo, Mrs. K.....Laurium
Roche, Mrs. A. M.....Laurium
Roche, Mrs. J.....Laurium
Rupprecht, Mrs. Lillian....Calumet
Sloan, Mrs. P. S.....Houghton
Smith, Mrs. C. R.....Hancock
Stern, Mrs. I. D.....Houghton
Wickliffe, Mrs. T. P.....Calumet
Winkler, Mrs. H. J.....L'Anse

HURON COUNTY

Dixon, Mrs. Ralph.....Pigeon
Gettel, Mrs. Roy.....Bad Axe
Herrington, Mrs. Willet....Bad Axe
Oakes, Mrs. Charles W.....
Harbor Beach
Retsema, Mrs. John.....Sebewaing
Scheurer, Mrs. Clare.....Pigeon
Sorensen, Mrs. Maurice.....Kinde
Steinhardt, Mrs. Edward.....Elkton
Strempek, Mrs. Walter.....Pigeon
Turner, Mrs. Phillip..Harber Beach
Weiss, Mrs. Arno.....Bad Axe
Wible, Mrs. C.....Sebewaing

IONIA COUNTY

Campbell, Mrs. R. E.....Ionia
Cook Mrs. George.....Ionia
Cox, Mrs. T. J.....Ionia
Foust, Mrs. J. C.....Ionia
Harder, Mrs. J. G.....Ionia
Hoffs, Mrs. M. A.....Lake Odessa
Kopchick, Mrs. Joseph.....Muir
Murawa, Mrs. Vincent J.....Ionia
Seidel, Mrs. Karl E.....Ionia
Slagh, Mrs. M. E.....Saranac
Snider, Mrs. John D.....Ionia
Socha, Mrs. E. S.....Ionia
Tannheimer, Mrs. John F.....Ionia
Trinca, Mrs. Peter J.....Ionia

INGHAM COUNTY

Altland, Mrs. J. K.....Lansing
Badgley, Mrs. W. O.....Lansing
Baker, Mrs. Arthur G.....
East Lansing
Bates, Mrs. R. D.....Lansing
Bauer, Mrs. T. L.....East Lansing
Behen, Mrs. W. C.....Lansing
Bevez, Mrs. F. L.....Lansing
Bowersox, Mrs. R. J.....Lansing
Bradford, Mrs. C. W.....
East Lansing
Breakey, Mrs. Robert S...Lansing
Brenner, Mrs. John.....Lansing
Brown, Mrs. F. W., Jr.....Lansing
Brubaker, Mrs. E. W.....Lansing
Brucker, Mrs. K. B.....Lansing
Burhans, Mrs. R. A...East Lansing
Calomeni, Mrs. A. D.....Lansing
Cameron, Mrs. W. J.....Lansing
Carr, Mrs. E. I.....Lansing
Cheney, Mrs. W. D.....Lansing
Christian, Mrs. L. G.....Lansing
Cope, Mrs. H. E.....Lansing
Cowan, Mrs. John A.....
East Lansing
Crandall, Mrs. Clarence.....Holt
Cross, Mrs. F. S.....East Lansing
Cushman, Mrs. F.....Lansing
Darling, Mrs. L. H.....Lansing
Davenport, Mrs. C. S.....
East Lansing
Dean, Mrs. Carleton..East Lansing
DeVries, Mrs. C. F.....Lansing
Doyle, Mrs. C. P.....Lansing
Drolett, Mrs. Fred.....Lansing
Drolett, Mrs. L. A.....Lansing
Folkers, Mrs. L.....East Lansing
Fortino, Mrs. S. P.....Lansing
Fosget, Mrs. Wilbur.....Lansing
French, Mrs. H. L.....Lansing
Gardner, Mrs. C. B.....Lansing
Garlinghouse, Mrs. A. J...Lansing
Harris, Mrs. H. W.....Lansing
Harrison, Mrs. W. H.....Lansing
Harrold, Mrs. J. F.....Lansing
Hart, Mrs. L. C.....Lansing
Hayford, Mrs. W. D.....
East Lansing
Haze, Mrs. H. A.....Lansing
Heald, Mrs. G. H.....Lansing
Heckert, Mrs. F. B.....Lansing
Heckert, Mrs. J. K.....East Lansing
Heustis, Mrs. A. E.....East Lansing
Himmelberger, Mrs. R. J...Lansing
Hodges, Mrs. K. P.....Lansing
Holm, Mrs. M. L.....Lansing
Huggett, Mrs. C.....Lansing
Isbister, Mrs. J. L.....Lansing
Jacob, Mrs. S. S.....East Lansing
Johnson, Mrs. H. T.....Lansing
Johnson, Mrs. Kenneth H.....
Lansing
Jones, Mrs. F. A.....East Lansing
Kahn, Mrs. David.....Lansing
Kalmbach, Mrs. R. E.....Lansing
Kiefer, Mrs. Guy.....East Lansing
Landy, Mrs. G. R.....Lansing
LeDuc, Mrs. D. M.....East Lansing
Le Vett, Mrs. H. L...East Lansing
Loree, Mrs. M. C.....Lansing
Lucas, Mrs. T. A.....Lansing
Ludlum, Mrs. L. C.....Lansing
Martin, Mrs. W.....Lansing
McCorvie, Mrs. C. R.....
East Lansing
McCrumb, Mrs. R. R.....Lansing
McGillicuddy, Mrs. J. E...Lansing
McGillicuddy, Mrs. O. B.....
East Lansing
McGillicuddy, Mrs. R. J.....
East Lansing
McIntyre, Mrs. J. E.....Lansing
McNamara, Mrs. W. E.....Lansing
Meade, Mrs. Robt.....East Lansing
Meade, Mrs. W. H.....East Lansing
Mercer, Mrs. W. E.....East Lansing
Miller, Mrs. H. A.....Lansing
Morelli-Pando, Mrs. L.....Lansing
Morrow, Mrs. R. J.....Lansing
Neering, Mrs. Jas. C.....Lansing
Ochsner, Mrs. P. J.....Lansing
Owen, Mrs. A. E.....East Lansing
Pinkham, Mrs. R. A.....Lansing
Place, Mrs. E. H.....Lansing
Pleascher, Mrs. W. H.....
Lake Lansing
Pomeroy, Mrs. R. W.....
East Lansing
Poppen, Mrs. C. I.....East Lansing
Prall, Mrs. H. J.....East Lansing
Randall, Mrs. O. M.....Lansing
Richards, Mrs. F.....East Lansing
Robson, Mrs. E. J.....East Lansing
Rozan, Mrs. J. S.....Okemos
Russell, Mrs. Claude V.....Lansing
Sander, Mrs. J.....East Lansing
Schultz, Mrs. A. E.....East Lansing
Shaw, Mrs. M.....Lansing
Sherman, Mrs. G. A...East Lansing
Sichler, Mrs. H. G.....Lansing
Silverman, Mrs. I.....Lansing
Sleight, Mrs. J. L.....Lansing
Snell, Mrs. D.....Lansing
Spagnuelo, Mrs. A. J.....Lansing
Spencer, Mrs. C. T...East Lansing
Spencer, Mrs. Perry..East Lansing
Stanley, Mrs. A. L.....East Lansing
Steiner, Mrs. S. D.....East Lansing
Stiles, Mrs. F.....East Lansing
Stow, Mrs. Robt. M...East Lansing
Strauss, Mrs. P. C.....Lansing
Stringer, Mrs. C. J.....Lansing
Swartz, Mrs. F. C.....East Lansing
Toothaker, Mrs. K. W.....Lansing
Trescott, Mrs. R. F.....Lansing
VanderZalm, Mrs. T. P.....Lansing
Venier, Mrs. J. H.....Lansing
Wadley, Mrs. R.....East Lansing
Walker, Mrs. Leo.....Lansing
Warford, Mrs. J. T.....Lansing
Webb, Mrs. R. O.....Okemos
Weinburg, Mrs. H. B.....
East Lansing
Wellman, Mrs. J.....Lansing
Wiley, Mrs. H. W.....Lansing
Willson, Mrs. H. S.....Lansing
Worthington, Mrs. R.....Lansing

JACKSON COUNTY

Adams, Mrs. E. W.....Jackson
Ahronheim, Mrs. J. H.....Jackson
Appel, Mrs. S.....Jackson
Baker, Mrs. George.....Parma
Beckwith, Mrs. F. W.....Homer
Brashares, Mrs. Z. A.....Brooklyn
Bullen, Mrs. G. R.....Jackson
Clarke, Mrs. Corwin.....Jackson
Cooley, Mrs. C. Warren....Jackson
Cooley, Mrs. R. M.....Jackson
Corley, Mrs. Cecil.....Jackson
Corley, Mrs. E. H.....Jackson
Cox, Mrs. Ferdinand.....Jackson
Culver, Mrs. Guy D...Stockbridge
DeMay, Mrs. J. D.....Jackson
DeMay, Mrs. C. E.....Jackson
Deming, Mrs. R. C.....Jackson
Dengler, Mrs. C. R.....Jackson
Dickman, Mrs. H. M.....Hudson
Douglas, Mrs. E. W.....Jackson
Filip, Mrs. H. K.....Jackson
Finch, Mrs. R. L.....Jackson
Finton, Mrs. R. E.....Jackson
Finton, Mrs. W. L.....Jackson
Foust, Mrs. W. L.....Grass Lake
Hackett, Mrs. T. E.....Jackson
Hackett, Mrs. T. L.....Jackson
Hanft, Mrs. C. F.....Springport
Hanna, Mrs. Roger.....Jackson
Hardie, Mrs. G. C.....Jackson
Harris, Mrs. L. J.....Jackson
Hicks, Mrs. G. C.....Jackson
Hunt, Mrs. M. E.....
Vandercook Lake
Joerin, Mrs. W. A.....Jackson
Kempton, Mrs. Geo.....Jackson
Kraft, Mrs. L. C.....Leslie
Kudner, Mrs. D. F.....Jackson
Lake, Mrs. Ed.....Jackson
Lake, Mrs. W. H.....Jackson
Landron, Mrs. Dan L.....Jackson
Leahy, Mrs. E. O.....Jackson
Lenz, Mrs. C. R.....Jackson
Leonard, Mrs. C. A.....Jackson
Lewis, Mrs. E. F.....Jackson
Linden, Mrs. V. E.....Jackson
Ludwick, Mrs. J. E.....Jackson
McLaughlin, Mrs. M. J.....Jackson
McLaughlin, Mrs. H. B.....Jackson
Meads, Mrs. J. B.....Jackson
Medlar, Mrs. B. E.....Jackson
Miller, Mrs. J. L.....Jackson
Miller, Mrs. S. L.....Jackson
Munro, Mrs. C. D.....Jackson
Munro, Mrs. N. D.....Jackson
Murphy, Mrs. B. M.....Jackson
Newton, Mrs. R. E.....Jackson
Olesky, Mrs. Stanley....Ann Arbor
Otis, Mrs. G. L.....Jackson
Parker, Mrs. E. E.....Leslie
Payne, Mrs. A. K.....Jackson
Porter, Mrs. H. W.....Jackson
Pray, Mrs. F. F.....Jackson
Prav, Mrs. G. R.....Jackson
Rice, Mrs. J. W.....Jackson
Ries, Mrs. R. G.....Jackson
Sargent, Mrs. L. E.....Jackson
Sautter, Mrs. W. A.....Horton
Schmidt, Mrs. T. E.....Jackson
Scott, Mrs. J. A.....Jackson
Shaeffer, Mrs. A. M.....Jackson
Shaeffer, Mrs. Dale.....Jackson
Sill, Mrs. H. W.....Jackson
Sirhal, Mrs. A. M.....Clark Lake
Smith, Mrs. D. W.....Jackson
Southwick, Mrs. W. A...Springport
Stewart, Mrs. Lewis L.....Jackson
Stewart, Mrs. M. W.....Jackson
Stolberg, Mrs. Carl A.....Jackson
Stone, Mrs. Ethon L.....Jackson
Susskind, Mrs. M. V.....Jackson
Tate, Mrs. C. E.....Jackson
Taylor, Mrs. R. V.....Jackson
Thayer, Mrs. E. A.....Jackson
Thompson, Mrs. Tom.....Jackson
Torwick, Mrs. E. J.....Jackson
Townsend, Mrs. J. W.....
Vandercook Lake
VanSchoick, Mrs. F.....Jackson
VanSchoick, Mrs. John....Hanover
VanWagnen, Mrs. F. I.....Jackson
Vivirski, Mrs. E. E.....Jackson
Wallace, Mrs. W. S.....Jackson
Wholihan, Mrs. J. W.....Jackson
Wickham, Mrs. W. A.....Jackson
Winter, Mrs. G. E.....Jackson

Honorary Members

Alter, Mrs. R. H.....Jackson
Smith, Mrs. J. C.....Jackson
Peterson, Mrs. E. S.....Jackson
Lathrop, Mrs. W. W.....Jackson
Hurley, Mrs. W. B.....Jackson
Myers, Mrs. J. H.....Jackson
Scheurer, Mrs. P. A.....Manchester
Schepler, Mrs. C. W.....Brooklyn

KALAMAZOO COUNTY

Aach, Mrs. Hugo.....Kalamazoo
Alexander, Mrs. C. A...Kalamazoo
Andrews, Mrs. Sherman.....
Kalamazoo
Appel, Mrs. Ben.....Kalamazoo
Appel, Mrs. Wm.....Kalamazoo
Banner, Mrs. L. R.....
Hickory Corners
Barry, Mrs. Manley....Kalamazoo
Bennett, Mrs. C. L.....Kalamazoo
Bennett, Mrs. Keith....Kalamazoo
Birch, Mrs. W.....Kalamazoo
Betz, Mrs. Eldean.....Kalamazoo
Borgman, Mrs. Wallace.....
Kalamazoo
Boys, Mrs. C. E.....Kalamazoo
Breneman, Mrs. James..Galesburg
Brown, Mrs. I. W.....Kalamazoo
Burbidge, Mrs. Earl.....Parchment
Burrell, Mrs. Robert....Kalamazoo
Burt, Mrs. K.....Kalamazoo
Callander, Mrs. C. G...Mil. Service
Chrest, Mrs. C. P.....Kalamazoo
Cobb, Mrs. H. R.....Kalamazoo
Conrad, Mrs. Maynard..Kalamazoo
Cook, Mrs. R. G.....Kalamazoo
Cooper, Mrs. Paul.....Kalamazoo
Crane, Mrs. Bart.....Augusta
Crawford, Mrs. Kenneth.....
Kalamazoo
Creager, Mrs. R. O.....Kalamazoo
Cretsinger, Mrs. Francis.....
Kalamazoo
Currier, Mrs. K.....Kalamazoo
Dana, Mrs. Robert.....Kalamazoo
DeGroat, Mrs. Albert..Kalamazoo
Delbert, Mrs. Stewart..Kalamazoo
DeLong, Mrs. Robt.....Kalamazoo
DenBlyker, Mrs. W.....Kalamazoo
DePree, Mrs. H. E.....Kalamazoo
Dew, Mrs. Robert.....Kalamazoo
Dewitt, Mrs. Norman..Kalamazoo
Dick, Mrs. Leo.....Kalamazoo
Doezma, Mrs. Edward..Kalamazoo
Dowd, Mrs. Bernard....Kalamazoo
Dovle, Mrs. Fred.....Kalamazoo
Estill, Mrs. Don.....Kalamazoo
Fast, Mrs. Ralph.....Kalamazoo
Fath, Mrs. August.....Kalamazoo
Finton, Mrs. Max.....Kalamazoo
Fopeano, Mrs. John.....Kalamazoo
French, Mrs. M.....Kalamazoo
Fuller, Mrs. Paul.....Kalamazoo
Gerstner, Mrs. Louis....Kalamazoo
Green, Mrs. Wm.....Kalamazoo
Grekin, Mrs. Robert....Kalamazoo
Hammer, Mrs. John....Kalamazoo
Hanson, Mrs. Curtis....Kalamazoo
Harrelson, Mrs. W. D...Kalamazoo
Hayner, Mrs. Russell....Kalamazoo
Heersma, Mrs. H. S...Kalamazoo
Herbert, Mrs. Walter.....Richland
Hildreth, Mrs. Roscoe..Kalamazoo
Hodgeman, Mrs. A. B...Kalamazoo
Hoebeke, Mrs. W.....Kalamazoo
Howard, Mrs. Grant....Kalamazoo
Hubbell, Mrs. R. J.....Kalamazoo
Irwin, Mrs. Wm.....Kalamazoo
Jackson, Mrs. H.....Kalamazoo
Jennings, Mrs. Robert..Kalamazoo
Jennings, Mrs. W. O...Kalamazoo
Kavanaugh, Mrs. Wm...Kalamazoo
Kilgore, Mrs. Robert....Kalamazoo
Klerk, Mrs. Wm.....Kalamazoo
Koestner, Mrs. P.....Kalamazoo
Lavender, Mrs. H.....Kalamazoo
Lawrence, Mrs. James..Kalamazoo
Locklin, Mrs. W.....Kalamazoo
Littig, Mrs. John.....Kalamazoo
Loynd, Mrs. James.....Kalamazoo
MacDonald, Mrs. M. A.....Augusta
MacGregor, Mrs. John..Parchment
Machin, Mrs. Harold..Kalamazoo
Malone, Mrs. James.....Kalamazoo
Margolis, Mrs. Fred.....Kalamazoo
Marshall, Mrs. Don.....Kalamazoo
Marshall, Mrs. Wm.....Kalamazoo
Martens, Mrs. Irwin....Kalamazoo
Mav, Mrs. Donald.....Kalamazoo
McCarthy, Mrs. T. S.....Kalamazoo
Moe, Mrs. Rex.....Kalamazoo
Morter, Mrs. R. A.....Kalamazoo
Nell, Mrs. Edward.....Kalamazoo
Nibbelink, Mrs. Benj...Kalamazoo
Overbey, Mrs. Chas., Jr.....
Kalamazoo
Patmos, Mrs. Martin....Kalamazoo
Pearson, Mrs. E. O.....Kalamazoo
Peelen, Mrs. Matthew..Kalamazoo
Peelen, Mrs. Wm.....Kalamazoo
Perry, Mrs. C.....Kalamazoo
Pullon, Mrs. Alton.....Richland
Rigterink, Mrs. Gerald..Kalamazoo
Roberts, Mrs. M. S.....Kalamazoo
Rockwell, Mrs. D.....Kalamazoo
Ryan, Mrs. F. P.....Kalamazoo
Scholten, Mrs. Roger....Kalamazoo
Schrier, Mrs. C. M.....Kalamazoo
Scott, Mrs. Wm.....Kalamazoo
Shook, Mrs. Ralph.....Kalamazoo
Siemsen, Mrs. W.....Kalamazoo

Sisk, Mrs. Wilfred.....Kalamazoo
Slatmeyer, Mrs. Karel..Kalamazoo
Smith, Mrs. T. C.....Kalamazoo
Sofen, Mrs. M. B.....Kalamazoo
Southworth, Mrs. M.....Schoolcraft
Stiller, Mrs. Anthony....Kalamazoo
Stryker, Mrs. Homer.....Kalamazoo
Upjohn, Mrs. Gifford....Kalamazoo
VanderVelde, Mrs. K...Kalamazoo
Verhage, Mrs. M. D.....Kalamazoo
Volderauer, Mrs. J.....Kalamazoo
Warnke, Mrs. R. D.....Kalamazoo
Weadon, Mrs. P.....Kalamazoo
Williamson, Mrs. Ed.....Kalamazoo
Youngs, Mrs. C. A.....Kalamazoo

Emeritus Members

Balch, Mrs. R. E...Melbourne, Fla.
Barnabee, Mrs. James....Kalamazoo
Collins, Mrs. W. E.....Kalamazoo
Crum, Mrs. Leo.....Richland
DeWitt, Mrs. Leslie.....Kalamazoo
Fulkerson, Mrs. C. B.....Kalamazoo
Fuller, Mrs. R. T.....Kalamazoo
Grant, Mrs. F. E.....Kalamazoo
Gregg, Mrs. S.....Kalamazoo
Shackelton, Mrs. W. E...Kalamazoo
Shepard, Mrs. B. A.....Kalamazoo
Snyder, Mrs. Roscoe.....Kalamazoo
Upjohn, Mrs. L. N.....Kalamazoo
Wilbur, Mrs. E. P.....Kalamazoo
Youngs, Mrs. A. S.....Kalamazoo

KENT COUNTY

Aitken, Mrs. G. T...Grand Rapids
Albers, Mrs. G. D.....Grand Rapids
Andre, Mrs. H. M.....Grand Rapids
Avery, Mrs. Noyes L., Jr.....
Grand Rapids
Baert, Mrs. Geo. H...Grand Rapids
Ballard, Mrs. M. S...Grand Rapids
Balyeat, Mrs. G. W...Grand Rapids
Batts, Mrs. Martin....Grand Rapids
Beaton, Mrs. J. H...Grand Rapids
Beeman, Mrs. C. B...Grand Rapids
Beets, Mrs. W. C.....Grand Rapids
Bell, Mrs. C. M.....Grand Rapids
Benjamin, Mrs. Howard G.....
Grand Rapids
Benson, Mrs. R. R...Grand Rapids
Bignall, Mrs. Rex.....Grand Rapids
Blackburn, Mrs. Henry M.....
Grand Rapids
Boelkins, Mrs. R. G...Grand Rapids
Boersma, Mrs. Don...Grand Rapids
Boet, Mrs. John T.....Grand Rapids
Bosch, Mrs. Leon C...Grand Rapids
Boyce, Mrs. D. C.....Grand Rapids
Brace, Mrs. Fred C...Grand Rapids
Brink, Mrs. J. R.....Grand Rapids
Brook, Mrs. J. D.....Grandville
Buist, Mrs. S. J.....Grand Rapids
Bull, Mrs. Frank.....Sparta
Burroughs, Mrs. F., Jr...Grandville
Butler, Mrs. Wm. J...Grand Rapids
Carpenter, Mrs. Luther C.....
Grand Rapids
Cayce, Mrs. Wm.....Grand Rapids
Chandler, Mrs. D.....Grand Rapids
Clement, Mrs. D.....Grand Rapids
Colvin, Mrs. W. G...Grand Rapids
Corbus, Mrs. B. R.....Grand Rapids
Crane, Mrs. Harold..Grand Rapids
Cuncannon, Mrs. Edw. M.....
Grand Rapids
Currier, Mrs. F. P.....Grand Rapids
Damstra, Mrs. H. J...Grand Rapids
Davis, Mrs. D. B.....Grand Rapids
Dawson, Mrs. W. D...Grand Rapids
DeBoer, Mrs. C. J.....Grand Rapids
DeBoer, Mrs. G. W...Grand Rapids
DeMaagd, Mrs. Gerald....Rockford
DeMol, Mrs. R.....Grand Rapids
Denham, Mrs. R. H...Grand Rapids
DePree, Mrs. Joe.....Grand Rapids
DeVel, Mrs. Leon....Grand Rapids
DeVries, Mrs. D.....Grand Rapids
Dewey, Mrs. K. A.....Grand Rapids
Diskey, Mrs. Don.....Grand Rapids
Dixon, Mrs. W. L.....Grand Rapids
Doctor, Mrs. L.....Grand Rapids
Droste, Mrs. James..Grand Rapids
Dyer, Mrs. David.....Grand Rapids
Eaton, Mrs. R. M.....Grand Rapids
Eggleston, Mrs. H. R.....
Grand Rapids
Fahlund, Mrs. Geo. T. R.....
Grand Rapids
Failing, Mrs. J. F.....Grand Rapids
Farber, Mrs. C. E.....Grand Rapids
Faust, Mrs. L. W.....Grand Rapids
Fellows, Mrs. K.....Grand Rapids
Ferguson, Mrs. J.....Grand Rapids
Ferguson, Mrs. Lynn A.....
Grand Rapids
Ferguson, Mrs. W. S.....Ludington
Ferrand, Mrs. L. G.....Rockford
Fitts, Mrs. Ralph L...Grand Rapids
Flynn, Mrs. J. D.....Grand Rapids
Foshee, Mrs. J. C.....Grand Rapids
Frantz, Mrs. C. H.....Grand Rapids
Fuller, Mrs. E. H.....Grand Rapids
Fuller, Mrs. Wm. J...Grand Rapids
Gamm, Mrs. K. E.....Grand Rapids
Gibbs, Mrs. F. F.....Grand Rapids
Gilbert, Mrs. R. H...Grand Rapids
Gillett, Mrs. F. S.....Grand Rapids
Grant, Mrs. Lee O...Grand Rapids
Grass, Mrs. Ed. J.....Grand Rapids
Gray, Mrs. Fred B...Grand Rapids
Griffith, Mrs. L. S.....Grand Rapids
Haeck, Mrs. Wm.....Grand Rapids
Hagerman, Mrs. David B.....
Grand Rapids
Hamp, Mrs. A.....Grand Rapids
Heetderks, Mrs. Dewey R.....
Grand Rapids
Hill, Mrs. A. Morgan.....Ada
Hill, Mrs. T. B.....Lowell
Hodgen, Mrs. J. T...Grand Rapids
Hoekstra, Mrs. A. L.....
Grand Rapids
Hoffs, Mrs. Albertus..Grand Rapids
Holcomb, Mrs. J. Winslow.....
Grand Rapids
Hollander, Mrs. S.....Grand Rapids
Hoogerhyde, Mrs. J...Grand Rapids
Houghton, Mrs. R. C.....
Grand Rapids
Hudson, Mrs. H.....Grand Rapids
Hufford, Mrs. A. R...Grand Rapids
Humphrey, Mrs. James C.....
Grand Rapids
Hyland, Mrs. Wm. A.....
Grand Rapids
Ireland, Mrs. H. D...Grand Rapids
Jack, Mrs. Wm.....Grand Rapids
Jameson, Mrs. Fred..Grand Rapids
Jaracz, Mrs. W. J.....Grand Rapids
Jarvis, Mrs. Chas.....Grand Rapids
Jellema, Mrs. John F.....Holland
Johns, Mrs. D.....Grand Rapids
Johnston, Mrs. Wm. L.....
Grand Rapids
Jones, Mrs. Haven....Grand Rapids
Jones, Mrs. H. C.....Grand Rapids
Kelly, Mrs. E. F.....Grand Rapids
Klaus, Mrs. C. D.....Grand Rapids
Kniskern, Mrs. Paul W.....
Grand Rapids
Kooistra, Mrs. H. P...Grand Rapids
Kreulen, Mrs. H. J...Grand Rapids
Kruse, Mrs. Wm.....Grand Rapids
Lamberts, Mrs. A.....Grand Rapids
Lanning, Mrs. N.....Grand Rapids
Lentini, Mrs. Jos.....Grand Rapids
Lewis, Mrs. G.....Grand Rapids
Lieffers, Mrs. Harry..Grand Rapids
List, Mrs. Carl.....Grand Rapids
MacDonnell, Mrs. James.....
Grand Rapids
MacIntyre, Mrs. Dugald S.....
Grand Rapids
Marsh, Mrs. J. P.....Grand Rapids
Maurits, Mrs. R.....Grand Rapids
McCandliss, Mrs. Robt. J.....
Grand Rapids
McCormick, Mrs. J. K.....
Grand Rapids
McDougal, Mrs. Wm. J.....
Grand Rapids
McKenna, Mrs. Joseph L.....
Grand Rapids
McKinlay, Mrs. Leland.....Ada
Meade, Mrs. R.....Grand Rapids
Meeuwsen, Mrs. B.....Grand Rapids
Miller, Mrs. J. D.....Grand Rapids
Miller, Mrs. J. J.....Marne
Mitchell, Mrs. W. B.....
Grand Rapids
Moleski, Mrs. Jos.....Grand Rapids
Moleski, Mrs. S.....Grand Rapids
Moll, Mrs. A. M.....Grand Rapids
Montgomery, Mrs. John.....
Grand Rapids
Moore, Mrs. D.....Grand Rapids
Mouw, Mrs. Dirk.....Grand Rapids
Mulder, Mrs. G. A...Grand Rapids
Mulder, Mrs. J. D.....Grand Rapids
Murphy, Mrs. Miles..Grand Rapids
Nanzig, Mrs. R.....Grand Rapids
Nickel, Mrs. K.....Grand Rapids
Northouse, Mrs. Peter B.....
Grand Rapids
Notier, Mrs. V. A.....Grand Rapids
Oliver, Mrs. W. W.....Rockford
Paalman, Mrs. Russell G.....
Grand Rapids
Patterson, Mrs. P. W.....
Grand Rapids
Payne, Mrs. C. A.....Grand Rapids
Pearson, Mrs. G. A...Grand Rapids
Pedden, Mrs. John....Grand Rapids
Plekker, Mrs. J. D.....Grand Rapids
Pool, Mrs. J. D.....Grand Rapids
Posthuma, Mrs. Al...Grand Rapids
Pott, Mrs. A. L.....Grand Rapids
Pyle, Mrs. H. J.....Grand Rapids
Ragsdale, Mrs. L. V.....
Grand Rapids
Ralph, Mrs. L. Paul..Grand Rapids
Rasmussen, Mrs. Rich. A.....
Grand Rapids
Reed, Mrs. T.....Grand Rapids
Reus, Mrs. Wm.....Grand Rapids
Riekse, Mrs. J. M.....Grand Rapids

Rigterink, Mrs. John W.....
Grand Rapids
Riley, Mrs. Geo. L...Grand Rapids
Ringenberg, Mrs. J. C.....
Grand Rapids
Robbert, Mrs. John H...Grandville
Rodgers, Mrs. Wm...Grand Rapids
Rosenzweig, Mrs. L...Grand Rapids
Roth, Mrs. Emil.....Grand Rapids
Ryan, Mrs. John.....Grand Rapids
Sanders, Mrs. J. F.....Grand Rapids
Schaubel, Mrs. H. J...Grand Rapids
Schermerhorn, Mrs. L. J.....
Grand Rapids
Schneider, Mrs. George R.....
Grand Rapids
Schuitema, Mrs. Don. M.....
Grand Rapids
Scott, Mrs. Wm. B...Grand Rapids
Sevensma, Mrs. E. S..Grand Rapids
Sevensma, Mrs. E.....Grand Rapids
Sevey, Mrs. Leon E...Grand Rapids
Shellman, Mrs. M. W.....
Grand Rapids
Shepard, Mrs. B. H.....Lowell
Sidell, Mrs. R. H.....Grand Rapids
Slemons, Mrs. C. C...Grand Rapids
Sluyter, Mrs. J. S.....Grand Rapids
Smith, Mrs. A. B.....Grand Rapids
Smith, Mrs. R. B.....Grand Rapids
Smith, Mrs. R. E.....Grand Rapids
Snapp, Mrs. Carl F...Grand Rapids
Snyder, Mrs. C. H...Grand Rapids
Southwick, Mrs. G. H.....
Grand Rapids
Steffensen, Mrs. W. H.....
Grand Rapids
Stonehouse, Mrs. G. G.....
Grand Rapids
Stover, Mrs. V. E.....Grand Rapids
Stuart, Mrs. G. J.....Grand Rapids
Swenson, Mrs. H. C..Grand Rapids
Ten Have, Mrs. J.....Grand Rapids
Tesseine, Mrs. A. J...Grand Rapids
Thompson, Mrs. Edw. C.....
Grand Rapids
Thompson, Mrs. Frank D.....
Grand Rapids
Thomson, Mrs. John W.....
Grand Rapids
Tidey, Mrs. M. B.....Grand Rapids
Tiffany, Mrs. Jos.....Grand Rapids
Torgerson, Mrs. Wm. R.....
Grand Rapids
Truog, Mrs. C. P.....Grand Rapids
Uthoff, Mrs. Carl.....Grand Rapids
VanBelois, Mrs. H. J.....
Grand Rapids
Van Bree, Mrs. R. S.....
Grand Rapids
VandenBerg, Mrs. Allison.....
Grand Rapids
VandenBerg, Mrs. Wm.....
Grand Rapids
VanderPloeg, Mrs. Wm.....
Grand Rapids
VanDuine, Mrs. Henry J.....
Grand Rapids
VanNoord, Mrs. G. A.....
Grand Rapids
Van Portfliet, Mrs. Paul.....
Grand Rapids
VanSolkema, Mrs. Andrew.....
Grand Rapids
VanWoerkom, Mrs. Daniel.....
Grand Rapids
VanZwalenberg, Mrs. B. R.....
Grand Rapids
Veldman, Mrs. H. J.....
Grand Rapids
Venema, Mrs. J. R...Grand Rapids
Vining, Mrs. Keats K., Jr.....
Grand Rapids
Vis, Mrs. Wm. R.....Grand Rapids
Waterman, Mrs. D. F.....
Grand Rapids
Wells, Mrs. Merrill..Grand Rapids
Weller, Mrs. K. E.....Grand Rapids
Wenger, Mrs. J. N.....Coopersville
Wiese, Mrs. J.....Grand Rapids
Wilkes, Mrs. J. B.....Grand Rapids
Williams, Mrs. J. R...Grand Rapids
Willits, Mrs. Paul.....Grand Rapids
Winter, Mrs. G. E.....Grand Rapids
Wurz, Mrs. John F...Grand Rapids
Yared, Mrs. J. A.....Grand Rapids
Yegge, Mrs. John.....Kent City

Honorary Members

Irwin, Mrs. T. C.....Grand Rapids
Wenger, Mrs. A. V...Grand Rapids

LAPEER COUNTY

Baruch, Mrs. Leon.....Lapeer
Burley, Mrs. David.....Almont
Chapin, Mrs. C.....Columbiaville
Dorland, Mrs. Clarke.....Lapeer
Doty, Mrs. James.....Lapeer
Kiehle, Mrs. Anna.....Lapeer
Lass, Mrs. Edward.....Lapeer
McBride, Mrs. John.....Lapeer
Merz, Mrs. Henry.....Lapeer
O'Brien, Mrs. Daniel.....Lapeer
Rehn, Mrs. Adolph.....Lapeer
Smith, Mrs. Glenn.....Imlay City
Snowman, Mrs. Lynna.....Lapeer
Thomas, Mrs. J. O...North Branch
Thompson, Mrs. May.....Lapeer
Zemmer, Mrs. Harry.....Lapeer
Zolliker, Mrs. Carl.....Lapeer

Associate Members

Hunter, Miss Frances.....Lapeer
Hunter, Miss Mary Ellen....Lapeer

Honorary Member

Kay, Mrs. Wm.....Lapeer

MACOMB COUNTY

Adler, Mrs. Morton.....Detroit
Banting, Mrs. O. F.....Richmond
Barker, Mrs. J. G...St. Clair Shores
Brady, Mrs. Milo J.....Detroit
Buckley, Mrs. D. J...Mt. Clemens
Crawford, Mrs. A. M.....Rochester
Croman, Mrs. J. M.....Mt. Clemens
Curatolo, Mrs. Victor.....Detroit
Dudzinski, Mrs. Edm. J.....
New Baltimore
Engels, Mrs. John.....Richmond
Heine, Mrs. A. W.....Mt. Clemens
Henkin, Mrs. Wm.....Mt. Clemens
Kane, Mrs. Wm. J.....Mt. Clemens
Lynch, Mrs. R. E.....Grosse Pointe
Maguire, Mrs. Andrew..Van Dyke
Mattes, Mrs. Max.....Detroit
Moore, Mrs. George....Mt. Clemens
Mulligan, Mrs. P. T...Mt. Clemens
Persson, Mrs. G. A.....Mt. Clemens
Reitzel, Mrs. R. H.....Mt. Clemens
Revere, Mrs. J. O.....Mt. Clemens
Rivard, Mrs. C. F...St. Clair Shores
Salot, Mrs. Russell F...Mt. Clemens
Siegfried, Mrs. E. G...Mt. Clemens
Smith, Mrs. M. C.....Mt. Clemens
Stryker, Mrs. O. D.....
St. Clair Shores
Thompson, Mrs. Alfred A.....
Mt. Clemens
Ullrich, Mrs. R. W.....Mt. Clemens
Wellard, Mrs. Henry C.....
New Baltimore
Whitley, Mrs. A...St. Clair Shores
Wiley, Mrs. Duncan Bruce....Utica
Wolfson, Mrs. V. H...Mt. Clemens
Wyte, Mrs. Wm. C.....Mt. Clemens

Honorary Member

Peltier, Mrs. S. J.....Mt. Clemens

MANISTEE COUNTY

Dart, Mrs. Ralph.....Manistee
Grant, Mrs. C. L.....Manistee
Hansen, Mrs. Ernest C.....Manistee
Konopa, Mrs. John F.....Manistee
Miller, Mrs. Ernest B.....Manistee
Oakes, Mrs. Ellery A.....Manistee
Ogilvie, Mrs. Gordon D...Manistee
Osborn, Mrs. Samuel.....Manistee
Ramsdell, Mrs. H. A.....Manistee
Schwarz, Mrs. M. L.....Onekama

MARQUETTE-ALGER COUNTIES

Acocks, Mrs. James R...Marquette
Amolsch, Mrs. A. L.....Marquette
Barron, Mrs. B. C.....Munising
Bennett, Mrs. A. K.....Marquette
Bertucci, Mrs. J. P.....Ishpeming
Bolitho, Mrs. T. Boyd....Marquette
Casler, Mrs. Wilbur L...Marquette
Cooperstock, Mrs. M.....Marquette
Erickson, Mrs. A. N.....Ishpeming
Hornbogen, Mrs. D. P...Marquette
Howe, Mrs. L. W.....Marquette
Knudson, Mrs. George....Negaunee

Kronschnabel, Mrs. E. J.....Gwinn
Jaedecke, Mrs. R. G.....Ishpeming
Lambert, Mrs. W. C.....Marquette
Lyons, Mrs. James W., Jr.....
Marquette
Matthews, Mrs. N.....Marquette
MacIntyre, Mrs. Don....Ishpeming
Narotzky, Mrs. Archie....Ishpeming
Nicholson, Mrs. J. B.....Marquette
Swinton, Mrs. A. L.....Marquette
Wickstrom, Mrs. Geo. B...Munising
Youngquist, Mrs. L. L...Marquette

MASON COUNTY

Bacon, Mrs. H. G.....Scottville
Boldyreff, Mrs. Ephraim B...Custer
Boon, Mrs. A. Floyd.....Ludington
Martin, Mrs. Wm. S.....Ludington
Ostrander, Mrs. Robt.....Ludington
Paukstis, Mrs. Chas. A...Ludington
Scott, Mrs. Robert R.....Ludington
Spencer, Mrs. C. M.....Scottville
Switzer, Mrs. Geo. A.....Ludington

MECOSTA-OSCEOLA-LAKE COUNTIES

Anderson, Mrs. G.....Big Rapids
Bruggema, Mrs. Jacob.....Evart
Chess, Mrs. Leo F.....Reed City
Campbell, Mrs. J. B.....Big Rapids
Franklin, Mrs. Benjamin.....Remus
Ivkovich, Mrs. Paul.....Reed City
Kelsey, Mrs. Lee F.....Lakeview
Kilmer, Mrs. David.....Reed City
Kilmer, Mrs. Paul B.....Reed City
Kowaleski, Mrs. Edw.....Remus
Marston, Mrs. L. L.....Lakeview
Mitchell, Mrs. H. C.....Big Rapids
Nelson, Mrs. Lorenzo.....Baldwin
Treynor, Mrs. T. P.....Big Rapids
Van Auken, Mrs. Edw...Big Rapids
White, Mrs. J. A.....Big Rapids
Yeo, Mrs. Gordon H.....Big Rapids

MENOMINEE COUNTY

Agneberg, Mrs. N.....Menominee
Brukardt, Mrs. H. R.....Menominee
Dewane, Mrs. F. J.....Menominee
Dewane, Mrs. J. N.....Menominee
Flanagan, Mrs. C. B.....Menominee
Glickman, Mrs. L. C.....
Marinette, Wis.
Gonty, Mrs. A.....Menominee
Heidenreich, Mrs. J. R.....Daggett
Higley, Mrs. R. A.....Menominee
Jones, Mrs. W. S., Jr...Menominee
Jones, Mrs. W. S., Sr...Menominee
Kaye, Mrs. J. T.....Menominee
Kerwell, Mrs. K. C.....Stephenson
Peterson, Mrs. A. R.....Daggett
Sethney, Mrs. H. T.....Menominee
Sweany, Mrs. S. K.....Powers
Towey, Mrs. J. W.....Powers
Whitmarsh, Mrs. Thos...Stephenson

MIDLAND COUNTY

Ballmer, Mrs. Robert.....Midland
Berneir, Mrs. Joseph.....Sanford
Blackhurst, Mrs. Robert....Midland
Bowsher, Mrs. Robert.....Midland
Bulmer, Mrs. Dan.....Midland
Buskirk, Mrs. Maurice.....Midland
Carsons, Mrs. Adah.....Midland
Gay, Mrs. Harold.....Coleman
Gibson, Mrs. R.....Beaverton
Gordon, Mrs. Harold.....Midland
Gronemeyer, Mrs. Wm.....Midland
Howe, Mrs. Irwin.....Midland
Ittner, Mrs. Martin.....Midland
Kaasa, Mrs. Laurin.....Midland
Klingman, Mrs. H.....Midland
Kilian, Mrs. John.....Midland
Lansborough, Mrs. H.....Midland
Linsenman, Mrs. Karl.....Midland
MacCallum, Mrs. Chas.....Midland
Maynard, Mrs. Wm.....Coleman
Meisel, Mrs. Edward.....Midland
Murphy, Mrs. J. E.....Midland
Pike, Mrs. Melvin.....Midland
Poznak, Mrs. Leonard.....Midland
Randalph, Mrs. S. H.....Midland
Sherk, Mrs. Joseph.....Midland
Willison, Mrs. C. H.....Midland

MONROE COUNTY

Barker, Mrs. V. L.....Monroe
Blakey, Mrs. L. C.....Monroe
Bond, Mrs. W. W.....Monroe
Cigany, Mrs. Z. B.....Carleton
Dusseau, Mrs. S. V.....Erie
Ewing, Mrs. Robt. T.....Monroe
Flanders, Mrs. J. P.....Monroe
Frary, Mrs. R. A.....Monroe
Freud, Mrs. J. W.....Monroe
Hunter, Mrs. M. A.....Monroe
Kelso, Mrs. S. Newton.....Monroe
Laboe, Mrs. Edward.....Monroe
Lammers, Mrs. Gerald.....Ida
Long, Mrs. Edgar C.....Monroe
McDonald, Mrs. T. A.....Monroe
McMillan, Mrs. J. H.....Monroe
Meier, Mrs. Walter.....Monroe
Newcomer, Mrs. S. R.....Monroe
Reisig, Mrs. Albert H.....Monroe
Sanger, Mrs. E. J.....Monroe
Siffer, Mrs. J. J.....Monroe
Wagar, Mrs. Spencer.....Monroe
Williams, Mrs. Robt. J.....Monroe

MUSKEGON COUNTY

August, Mrs. Ralph....Spring Lake
Beers, Mrs. Charles W...Muskegon
Benedict, Mrs. A. L.....Muskegon
Bolthouse, Mrs. Robert..Muskegon
Boyd, Mrs. Devere R.....Muskegon
Bradshaw, Mrs. Park S.....
North Muskegon
Busard, Mrs. R. I.....Muskegon
Christopherson, Mrs. J...Muskegon
Clapp, Mrs. Henry.....Muskegon
Clark, Mrs. Harry.....Muskegon
Closz, Mrs. Harold.....Muskegon
Cramer, Mrs. J. T.....Muskegon
Dasler, Mrs. A.....Muskegon
Dykhuizen, Mrs. H.....Muskegon
Ellis, Mrs. Nicholas J.....Muskegon
Emerick, Mrs. Robt. W...Muskegon
Engstrom, Mrs. Albert....Muskegon
Fleischmann, Mrs. Chas. B.....
Muskegon
Fleishman, Mrs. N.....Muskegon
Gaikema, Mrs. E. W.....
North Muskegon
Garber, Mrs. Frank.....
North Muskegon
Gillard, Mrs. James L.....Muskegon
Griffith, Mrs. Robt. M...Muskegon
Harryman, Mrs. James..Muskegon
Hartwell, Mrs. S. W.....Muskegon
Heneveld, Mrs. Ed. H.....Muskegon
Heneveld, Mrs. John.....Muskegon
Holly, Mrs. Leland.....
North Muskegon
Joistad, Mrs. Arthur.....
North Muskegon
Kane, Mrs. Thomas J.....Muskegon
Kerr, Mrs. Howard J.....Muskegon
Lapham, Mrs. L.....Whitehall
Lauretti, Mrs. Emil J.....Muskegon
Laurin, Mrs. V. S.....
North Muskegon
LeFevre, Mrs. Wm.....Muskegon
Loder, Mrs. Louis L.....Muskegon
McNair, Mrs. John.....Muskegon
Maples, Mrs. Douglas.....
N. Muskegon
Medema, Mrs. Paul.....Muskegon
Meengs, Mrs. Marvin....Muskegon
Morford, Mrs. Fred.....Muskegon
Mulligan, Mrs. Allen.....Muskegon
Oden, Mrs. C. L. A.....Muskegon
Prentice, Mrs. Edw. W...Muskegon
Price, Mrs. Leonard.....Muskegon
Risk, Mrs. Robert D.....Muskegon

Scholle, Mrs. Norbert.....Muskegon
Shebesta, Mrs. Emil.....Muskegon
Swenson, Mrs. Leland....Muskegon
Teifer, Mrs. Chas.....Muskegon
Tellman, Mrs. H. Clay..Muskegon
Thornton, Mrs. E. S.....
North Muskegon
Tyler, Mrs. Wm...North Muskegon
Vanderlaan, Mrs. J.....
Muskegon Heights
VanGelder, Mrs. Wm. C.....
Muskegon
Wagenaar, Mrs. Ed. H...Muskegon
White, Mrs. Warren G...Muskegon
Wiersma, Mrs. Silas C...Muskegon
Wildgen, Mrs. Bernard..Muskegon
Wilson, Mrs. Pitt.....Muskegon

NEWAYGO COUNTY

Black, Mrs. Benjamin.....Holton
Clement, Mrs. Frederick.....Grant
Geerlings, Mrs. Lambert....Fremont
Geerlings, Mrs. Willis.....Fremont
Harris, Mrs. Dean W.....Fremont
Klein, Mrs. J. Paul.....Fremont
Masters, Mrs. Brooker L...Fremont
O'Neil, Mrs. John.....Fremont
Tompsett, Mrs. Arthur.....Hesperia
Vandenberg, Mrs. Tunis....Fremont

NORTHERN MICHIGAN COUNTIES

Allen, Mrs. Robert.....Petoskey
Conti, Mrs. Joseph.....Petoskey
Crippen, Mrs. Edward..Mancelona
Grate, Mrs. L. E.....Charlevoix
Lilga, Mrs. H. V.....Petoskey
Mayne, Mrs. Fred.....Cheboygan
McEvoy, Mrs. F. J...Harbor Springs
Rodgers, Mrs. John.....Bellaire
Saltonstall, Mrs. G. B...Charlevoix
Terr, Mrs. Isaac.....Charlevoix

NORTH CENTRAL COUNTY

Barstow, Mrs. R. D.....Gaylord
Beeby, Mrs. R. J.....West Branch
Clippert, Mrs. C. G.....Grayling
Hayes, Mrs. L. F.....Grayling
Henig, Mrs. B. Elmore.....Grayling
Jardine, Mrs. H. M...West Branch
Keyport, Mrs. C. R.....Grayling
Libke, Mrs. R. S.....Gaylord
Martzowka, Mrs. M.....Roscommon
Timreck, Mrs. H. A.....Gladwin

OAKLAND COUNTY

Abbott, Mrs. Vernon C.....Pontiac
Abbott, Mrs. J. A.....Pontiac
Arnkoff, Mrs. Harry.....Pontiac
Aschenbremer, Mrs. Zac.....
Farmington
Aulie, Mrs. Hal G.....Royal Oak
Baker, Mrs. R. J.....Birmingham
Bannow, Mrs. R. J.....
Bloomfield Hills
Barefield, Mrs. A. S.....Detroit
Bauer, Mrs. Ernest.....Hazel Park
Beattie, Mrs. W. G.....Ferndale
Beebe, Mrs. Willard E.....Pontiac
Belknap, Mrs. Warren..Royal Oak
Blakeney, Mrs. James R.....Pontiac
Boucher, Mrs. R. E.....Birmingham
Brown, Mrs. Arnold.....Pontiac
Bradley, Mrs. E. L.....Pontiac
Brooks, Mrs. N.....Detroit
Bullard, Mrs. R. W.....Clarkston
Burgess, Mrs. Charles M.....
Pleasant Ridge
Burke, Mrs. C. G.....Birmingham
Campbell, Mrs. M. D.....
Pleasant Ridge
Cefai, Mrs. A. F.....Pontiac
Christie, Mrs. E. W.....Birmingham
Cobb, Mrs. Leon.....Pontiac
Cobb, Mrs. Thomas.....Pontiac
Collins, Mrs. E. F.....Pontiac
Crissman, Mrs. H. G.....Ferndale
Cudney, Mrs. Ethan B.....Pontiac
Darling, Mrs. C. C.....
Bloomfield Hills
DeLowter, Mrs. H. H...Birmingham
Deutsch, Mrs. Wm. L.....
Huntington Wds.
Dobski, Mrs. Edwin J.....Pontiac
Dunlap, Mrs. G. L.....Pontiac
Dunn, Mrs. Lewis E.....Berkley
Durocher, Mrs. N. E.....Pontiac
Edwards, Mrs. Josephine....Pontiac
Ekeland, Mrs. C. T.....Pontiac
Endress, Mrs. Zac. F.....Pontiac
Evseef, Mrs. George.....Royal Oak
Farnham, Mrs. Lucius A.....Pontiac
Fink, Mrs. L. Jerome.....Pontiac
Foust, Mrs. Earl W.....Birmingham
Fox, Mrs. Ralph M.....Birmingham
Gaensbauer, Mrs. F.....Birmingham
Gates, Mrs. E. M.....Birmingham
Gehring, Mrs. H. W.....Detroit
Gehringer, Mrs. N. F.....Pontiac
Gerls, Mrs. Frank B.....Pontiac
Gibson, Mrs. Wellington....Milford
Gill, Mrs. Mathew J.....Pontiac
Green, Mrs. D.....Birmingham
Hackett, Mrs. Daniel J.....Pontiac
Haddock, Mrs. Douglas.....Pontiac
Hardy, Mrs. George C...Rochester
Hendren, Mrs. O. S.....Birmingham
Hoekman, Mrs. A.....Pontiac
Howlett, Mrs. E. V.....Pontiac
Hoyt, Mrs. D. F.....Pontiac
Huber, Mrs. P.....Birmingham
Hubert, Mrs. John R.....
Bloomfield Hills
Keefe, Mrs. E.....Birmingham
Kemp, Mrs. Felix J.....Pontiac
Kendrick, Mrs. H. F.....Pontiac
Koehler, Mrs. Wm.....Royal Oak
Kozonis, Mrs. M.....Pontiac
Lahti, Mrs. Paul T.....Royal Oak
LaMarche, Mrs. Norman....Berkley
Lambie, Mrs. J. S.....Birmingham
Lewis, Mrs. Sol N.....Ferndale
Ling, Mrs. Theo. W.....Farmington
Lowery, Mrs. P. M.....Pontiac
MacKenzie, Mrs. O. R.....
Walled Lake
Markle, Mrs. J. O.....Royal Oak
Markley, Mrs. John M.....Pontiac
McConkie, Mrs. J. P...Birmingham
McNeill, Mrs. H. H.....
Bloomfield Hills
Mehas, Mrs. Constantine....Pontiac
Meng, Mrs. Ralph H.....Rochester
Mercer, Mrs. Frank A.....Pontiac
Miller, Mrs. H. L.....Royal Oak
Miller, Mrs. Sidney....Birmingham
Monroe, Mrs. John.....Pontiac
Murtha, Mrs. A. V.....Pontiac
Naz, Mrs. John N.....Pontiac
Neafie, Mrs. C. A.....Pontiac
Norup, Mrs. John.....Berkley
Nosanchuk, Mrs. Joseph.....Pontiac
Olsen, Mrs. Richard.....Pontiac
Palmer, Mrs. Hayden.....Pontiac
Payton, Mrs. Chas. F...Birmingham
Pearce, Mrs. James F.....
Huntington Woods
Petroff, Mrs. George.....Pontiac
Phillips, Mrs. George.....Pontiac
Porritt, Mrs. Ross.....Pontiac
Prather, Mrs. F. W.....Milford
Raynale, Mrs. G. P.....Birmingham
Read, Mrs. J. A.....Birmingham
Reid, Fred T.....Clawson
Riggs, Mrs. Harry.....Pontiac
Riker, Mrs. Aaron D.....Pontiac
Rupp, Mrs. E. C.....Royal Oak
Russell, Mrs. V. P...Pleasant Ridge
Ruva, Mrs. Joseph.....Pontiac
Schuneman, Mrs. H.....Royal Oak
Sheffield, Mrs. L. C.....Pontiac
Shadley, Mrs. M. L.....Pontiac
Sigler, Mrs. Lewis.....Pontiac
Simpson, Mrs. E. K.....Pontiac
Smith, Mrs. Donald S.....Pontiac
Spoehr, Mrs. E.....Pleasant Ridge
Spencer, Mrs. L. H.....
Huntington Woods
Stahl, Mrs. Harold.....Oxford
Stageman, Mrs. John.....Clarkston
Stanley, Mrs. W. F...Pleasant Ridge
Steffes, Mrs. E. M.....Berkley
Steinberg, Mrs. N. W.....
Huntington Woods
Sullenberger, Mrs. N. H.....Pontiac
Sutton, Mrs. Palmer.....Royal Oak
Tuck, Mrs. Raymond.....Pontiac
VandenBerg, Mrs. K.....Pontiac
Van Haltern, Mrs. H. L.....Pontiac
Virga, Mrs. Geo. M.....
Huntington Woods
Wagley, Mrs. P. V.....Pontiac
Wessles, Mrs. R. R.....Birmingham
West, Mrs. C. I.....Detroit
Whitehouse, Mrs. J.....Pontiac
Wigent, Mrs. Ralph.....Pontiac
Williams, Mrs. John P.....Pontiac
Zujko, Mrs. Alphonse J.....Pontiac

OTTAWA COUNTY

Arendshorst, Mrs. Wm.....Holland
Beernink, Mrs. D.....Grand Haven
Bloemendal, Mrs. W. B.....
Grand Haven
Boersma, Mrs. Vernon.....Holland
Cook, Mrs. Carl.....Holland
DeYoung, Mrs. Fred....Spring Lake
Groat, Mrs. F.....Grand Haven
Frieswyck, Mrs. Melvin.....Zeeland
Hager, Mrs. R.....Hudsonville
Kemme, Mrs. G. J.....Zeeland
Kools, Mrs. Willis.....Holland
Kuipers, Mrs. S. W.....Holland
Nykamp, Mrs. R.....Holland
Ten Have, Mrs. R.....Grand Haven
Ten Pas, Mrs. Henry.....Hamilton
Timmerman, Mrs. E. C.....
Coopersville
Van Appledorn, Mrs. Chester....
Holland
Vander Berg, Mrs. E.....Holland
Vander Velde, Mrs. Otto..Holland
Wells, Mrs. K.....Spring Lake
Westrate, Mrs. Wm., Jr.....Holland
Winter, Mrs. John.....Holland

SAGINAW COUNTY

Ackerman, Mrs. G. L.....Saginaw
Albers, Mrs. M. J.....Saginaw
Anderson, Mrs. Wm. K.....Saginaw
Bishop, Mrs. H. Mort.....Saginaw
Brender, Mrs. F. P.....Frankenmuth
Bruton, Mrs. M. F.....Saginaw
Bucklin, Mrs. Robert.....Saginaw
Bullington, Mrs. Bert M...Saginaw
Busch, Mrs. Frank J.....Saginaw
Butler, Mrs. Milton G.....Saginaw
Cady, Mrs. Frederick J.....Saginaw
Cameron, Mrs. Allan K.....Saginaw
Campbell, Mrs. Lloyd A...Saginaw
Caumartin, Mrs. H. T.....Saginaw
Chisena, Mrs. Peter R...Bridgeport
Claytor, Mrs. Archer A.....Saginaw
Cortopassi, Mrs. Andre J...Saginaw
Cortopassi, Mrs. Vital E.....Saginaw
Cory, Mrs. Charles W.....Saginaw
Curts, Mrs. James H.....Saginaw
Ely, Mrs. Cecil W.....Saginaw
Fleschner, Mrs. T. E.....Birch Run
Gage, Mrs. David P.....Saginaw
Gamon, Mrs. A. E.....Saginaw
Gardner, Mrs. Joseph H...Saginaw
Gomon, Mrs. Louis D.....Saginaw
Harvie, Mrs. Lloyd C.....Saginaw
Heavenrich, Mrs. R. M.....Saginaw
Hester, Mrs. Eustace G.....Saginaw
Hill, Mrs. Victor L.....Saginaw
Howell, Mrs. Donald M.....Saginaw
Jaenichen, Mrs. Robt.....Saginaw
James, Mrs. John W.....Saginaw
Jiroch, Mrs. Ralph S.....Saginaw
Kerr, Mrs. Wm. B.....Saginaw
Kickham, Mrs. Edw. F.....Saginaw
Kolesar, Mrs. Robt. C.....Saginaw
Kretchmer, Mrs. T. V.....Saginaw
La Porte, Mrs. L. A.....Saginaw
Lohr, Mrs. Oliver W.....Saginaw
Luger, Mrs. Robt. I.....Saginaw
Lurie, Mrs. Robert.....Saginaw
Lyle, Mrs. Richard C.....Bridgeport
Mac Meekin, Mrs. J. W...Saginaw
Manning, Mrs. John E.....Saginaw
Manning, Mrs. J. W. III..Saginaw
Martzowka, Mrs. Wm. P...Saginaw
Maurer, Mrs. John A.....Saginaw
Mayne, Mrs. H. E.....Saginaw
McKinney, Mrs. Alex. R...Saginaw
Meyer, Mrs. Henry J.....Bridgeport
Mikan, Mrs. V. R.....Saginaw
Miller, Mrs. Glenn F.....Saginaw
Moon, Mrs. A. Raymond..Saginaw
Mudd, Mrs. Richard D.....Saginaw
Murray, Mrs. Charles R...Saginaw
Murray, Mrs. Morris J.....Saginaw
Nelson, Mrs. Oscar A.....Saginaw
Northway, Mrs. Robt. O...Saginaw
Novy, Mrs. Frank O.....Saginaw
Olson, Mrs. Carl Porter....Saginaw
Phillips, Mrs. H. A.....Saginaw
Pickett, Mrs. W. H.....Saginaw
Pietz, Mrs. Frederick.....Saginaw
Pillsbury, Mrs. E. R...Frankenmuth
Potvin, Mrs. Clifford D.....Saginaw
Powers, Mrs. Robert F.....Saginaw
Richards, Mrs. Ned W.....Saginaw
Richter, Mrs. E. P.....Saginaw
Richter, Mrs. Harry J.....Saginaw
Ruskin, Mrs. David B.....Saginaw
Ryan, Mrs. Richard S.....Saginaw
Sargent, Mrs. Donald V...Saginaw
Schaiberger, Mrs. E. G...Birch Run
Sharp, Mrs. Martin C.....Saginaw
Sheldon, Mrs. S. A.....Saginaw
Siler, Mrs. Delbert E.....Saginaw
Smiley, Mrs. Gordon L.....Saginaw
Smith, Mrs. Chandler.....Saginaw
Stahly, Mrs. Edward H.....Saginaw
Stander, Mrs. Aaron C.....Saginaw
Stewart, Mrs. Geo. W.....Saginaw
Sulfridge, Mrs. H. L., Jr...Saginaw
Thompson, Mrs. A. B.....Saginaw
Tiedke, Mrs. Gunther E...Saginaw
Toshach, Mrs. C. E.....Saginaw
Volk, Mrs. Vladimir K.....Saginaw
Watson, Mrs. Roy S.....Saginaw
Weidner, Mrs. Garland.....Saginaw
Westland, Mrs. Norman....Saginaw
Wright, Mrs. E. M.....Saginaw
Yntema, Mrs. Stuart.....Saginaw

SANILAC COUNTY

Bennett, Mrs. Wm.....Brown City
Blanchard, Mrs. E.....Deckerville
Gift, Mrs. Weldon A.....Marlette
Hart, Mrs. Robert K.....Croswell
Jason, Mrs. R. H.....Marlette
McCrea, Mrs. John.....Marlette
McGunegle, Mrs. K. T...Sandusky
Muir, Mrs. Neil.....Croswell
Seager, Mrs. M. Cole....Brown City
Tweedie, Mrs. Evans.....Sandusky
Tweedie, Mrs. Martin....Sandusky
Webster, Mrs. J. C.....Marlette

SHIAWASSEE COUNTY

Arnold, Mrs. A. L.....Owosso
Austin, Mrs. Eugene.....Owosso
Bach, Mrs. Norman F.....Owosso
Bates, Mrs. Lamont F.....Owosso
Bennett, Mrs. George.....Elsie
Brown, Mrs. Richard J.....Owosso
Elliott, Mrs. Bruce.....Owosso
Graves, Mrs. James.....Owosso
Greene, Mrs. I. W.....Owosso
Harkness, Mrs. Carleton.....Owosso
Hoshal, Mrs. Vern L.....Durand
Hume, Mrs. H. A.....Owosso
Janci, Mrs. Julius.....Owosso
McKnight, Mrs. Edwin K...Owosso
Merz, Mrs. Walter.....Owosso
Pochert, Mrs. R. C.....Owosso
Richards, Mrs. Chester.....Durand
Sackrider, Mrs. Geo. P.....Owosso
Sahlmark, Mrs. Joseph F...Owosso
Shepherd, Mrs. W. F.....Owosso
Slagh, Mrs. Earl N.....Elsie
Smith, Mrs. Franklin.....Ovid
Weinkauf, Mrs. Wm.....Corunna
Weston, Mrs. Claude.....Owosso
Willoughby, Mrs. Wm. A...Owosso

ST. CLAIR COUNTY

Bailey, Mrs. Robt.....Port Huron
Banting, Mrs. K.....Port Huron
Barss, Mrs. Joseph.....Port Huron
Battley, Mrs. J. S. C.....Port Huron
Beck, Mrs. Frank.....Port Huron
Beers, Mrs. Jos.....St. Clair
Benjamin, Mrs. C.....Port Huron
Borden, Mrs. Chas.....Port Huron
Bottomley, Mrs. Thos...Port Huron
Boughner, Mrs. Walter.....Algonac
Bowden, Mrs. Wm.....Marine City
Cleland, Mrs. Wm.....Port Huron
Clifford, Mrs. Robert.....St. Clair
Clyne, Mrs. B. C.....Yale
Coury, Mrs. J. J.....Marysville
Davison, Mrs. Wm.....Port Huron
Douvas, Mrs. N.....Port Huron
Fitzgerald, Mrs. E. W...Port Huron
Gholz, Mrs. Anthony....Port Huron
Gilmore, Mrs. John R...Port Huron
Holcomb, Mrs. R. J.....Marine City
Hoyt, Mrs. Charles.....Port Huron
Kahn, Mrs. Oscar.....Capac
Koch, Mrs. Donald.....Port Huron
Licker, Mrs. R. R.....Marysville
Ludwig, Mrs. C. A.....Port Huron
Ludwig, Mrs. Fred.....Port Huron
McCoy, Mrs. Leslie.....Port Huron
Martin, Mrs. Clyde.....Port Huron
Meredith, Mrs. Evert....Port Huron

Novak, Mrs. Walter.....Port Huron
Patterson, Mrs. D.....Port Huron
Pollock, Mrs. Donald....Port Huron
Sanderson, Mrs. Jos.....Port Huron
Schaefer, Mrs. Waldo..Port Huron
Sites, Mrs. Edgar.....Port Huron
Thomas, Mrs. Charles..Port Huron
Tisdel, Mrs. James H...Port Huron
Townley, Mrs. C. O.....Port Huron
Treadgold, Mrs. D.....Port Huron
Ulmer, Mrs. Arthur.....Port Huron
Urich, Mrs. Raoul.....Port Huron
Wass, Mrs. H. C.....St. Clair
Wheeler, Mrs. R. R.....Port Huron
Wilson, Mrs. Norman..Marine City

TUSCOLA COUNTY

Ballard, Mrs. J. H.....Cass City
Cook, Mrs. Raymond.....Akron
Dickerson, Mrs. W. W.....Caro
Donahue, Mrs. T. H.....Cass City
Flett, Mrs. Richard O...Millington
Gugino, Mrs. Frank.....Reese
Howlett, Mrs. Robert R.....Caro
Morris, Mrs. F. L.....Cass City
Nigg Mrs. Herbert.....Caro
Savage, Mrs. Lloyd.....Caro
Starmann, Mrs. Bernard..Cass City
Swanson, Mrs. E. C.....Vassar

ST. JOSEPH COUNTY

Berg, Mrs. Lawrence.....Sturgis
Blood, Mrs. John.....Three Rivers
Braham, Mrs. Wilbur.....Sturgis
Brunson, Mrs. Allen.....Sturgis
Emory, Miss Blanche.....Sturgis
Fiegel, Mrs. S. Albert.....Sturgis
Fortner, Mrs. Roscoe..Three Rivers
Jackobowitz, Mrs. J. W.....
Three Rivers
Kane, Mrs. D. M.....Sturgis
Lamb, Mrs. Harry.....Sturgis
Lepard, Mrs. Olin.....Sturgis
O'Dell, Mrs. Charles..Three Rivers
O'Dell, Mrs. John.....Three Rivers
Parrish, Mrs. M. F.....Sturgis
Penzotti, Mrs. Stan.....Three Rivers
Porter, Mrs. Clark.....Three Rivers
Reed, Mrs. Fred.....Three Rivers
Robinson, Mrs. Fred.....Sturgis
Shaw, Mrs. George....Three Rivers
Sheldon, Mrs. John.....Sturgis
Slote, Mrs. Leal K.....Constantine
Weisheit, Mrs. Ray.....Sturgis
Zimont, Mrs. Ray.....Constantine

WASHTENAW COUNTY

Alexander, Mrs. John....Ann Arbor
Allen, Mrs. Arthur.....Ann Arbor
Atchison, Mrs. R. M.....Northville
Barlow, Mrs. R. Craig..Ann Arbor
Barr, Mrs. Albert.....Ann Arbor
Bassow, Mrs. Paul.....Ann Arbor
Bauer, Mrs. Gerhard.....Ann Arbor
Baugh, Mrs. R. H.....Ypsilanti
Baum, Mrs. William.....Ann Arbor
Beebe, Mrs. Hugh.....Ann Arbor
Beierwaltes, Mrs. Wm...Ann Arbor
Belote, Mrs. George.....Ann Arbor
Belser, Mrs. Walter.....Ann Arbor
Botch, Mrs. E. S.....Ann Arbor
Bryant, Mrs. M. F., Jr...Ann Arbor
Campbell, Mrs. Darrell..Ann Arbor
Carron, Mrs. D. P.....Ann Arbor
Clyde, Mrs. Ensign.....Plymouth
Coller, Mrs. Frederick....Ann Arbor
Crook, Mrs. Clarence....Ann Arbor
Cummings, Mrs. H.....Ann Arbor
Curtis, Mrs. Arthur C...Ann Arbor
DeJong, Mrs. R. N.....Ann Arbor
De Tar, Mrs. John S.....Milan
Dingman, Mrs. R. O.....Ann Arbor
Dolfin, Mrs. W. E.....Ann Arbor
Dryer, Mrs. C. K.....Wayne
Engelke, Mrs. Otto.....Ann Arbor
English, Mrs. David.....Ann Arbor
Evans, Mrs. T. N.....Ann Arbor
Falls, Mrs. Harold.....Ann Arbor
Fink, Mrs. George.....Ann Arbor
Fralick, Mrs. Bruce.....Ann Arbor
Francis, Mrs. Thos., Jr...Ann Arbor
French, Mrs. A. J.....Ann Arbor
Frost, Mrs. Lyle.....Ypsilanti
Frye, Mrs. Carl.....Ann Arbor
Furstenberg, Mrs. Albert C.....
Ann Arbor
Ganzhorn, Mrs. Ed.....Ann Arbor
Gotz, Mrs. Alexander....Ann Arbor
Grawn, Mrs. Frank.....Ypsilanti
Haas, Mrs. Reynold.....Ann Arbor
Hagerman, Mrs. Geo.....Ann Arbor
Handorf, Mrs. H.....Northville
Hannum, Mrs. M. R.....Milan
Harris, Mrs. Bradley M...Ypsilanti
Harris, Mrs. Scott T.....Ypsilanti
Hendrickson, Mrs. W...Ann Arbor
Himler, Mrs. Leonard....Ann Arbor
Hodges, Mrs. F. J.....Ann Arbor
House, Mrs. Frederic....Ann Arbor
Howard, Mrs. Stacey....Ann Arbor
Ideson, Mrs. Robert.....Ann Arbor
Jaarsma, Mrs. Ray. A...Ann Arbor
Kambley, Mrs. Arnold..Ann Arbor
Keene, Mrs. Clifford.....Ann Arbor
Kemper, Mrs. John.....Ann Arbor
Kenney, Mrs. J. A., Jr...Ann Arbor
Kretschmar, Mrs. N.....Ann Arbor
La Fever, Mrs. Sidney....Ann Arbor
Magee, Mrs. K. R.....Ann Arbor
Magielski, Mrs. J. E.....Ann Arbor
Maher, Mrs. J. A.....Ann Arbor
Marshall, Mrs. Mark.....Ann Arbor
Martin, Mrs. D. W.....Ypsilanti
Maxwell, Mrs. James....Ann Arbor
Milford, Mrs. Albert.....Ypsilanti
Muehlig, Mrs. George....Ann Arbor
Newton, Mrs. Charles....Ann Arbor
O'Conner, Mrs. S.....Ann Arbor
Orebaugh, Mrs. John....Ann Arbor
Parnall, Mrs. C. G.....Ann Arbor
Peet, Mrs. Max M.....Ann Arbor
Pollard, Mrs. H. M.....Ann Arbor
Rae, Mrs. James W.....Ann Arbor
Ratliff, Mrs. R. K.....Ann Arbor
Riecker, Mrs. Herman....Ann Arbor
Riggs, Mrs. Harold.....Ann Arbor
Robinson, Mrs. Wm. D...Ann Arbor
Ross, Mrs. C. Howard....Ann Arbor
Ryan, Mrs. Ralph.....Ann Arbor
Saunders, Mrs. Allen.....Ann Arbor
Sayre, Mrs. Geo. S.....Ypsilanti
Schneider, Mrs. R. C.....Ann Arbor
Schumacher, Mrs. W. E.....
Ann Arbor
Scoville, Mrs. Henry A.....Ypsilanti
Seevers, Mrs. M. H.....Ann Arbor
Seime, Mrs. Reuben.....Ypsilanti
Sheldon, Mrs. John M...Ann Arbor
Sink, Mrs. Emory.....Ann Arbor
Slocum, Mrs. George....Ann Arbor
Spears, Mrs. Clarence.....Ypsilanti
Struthers, Mrs. J. N. P...Ypsilanti
Sturgis, Mrs. Cyrus C...Ann Arbor
Teed, Mrs. R. W.....Ann Arbor
Thieme, Mrs. E. Thurston.....
Ann Arbor
Towsley, Mrs. Harry A.....
Ann Arbor
Vaughan, Mrs. Henry....Ann Arbor
Waggoner, Mrs. Raymond W.....
Ann Arbor
Westover, Mrs. Charles..Plymouth
Wicht, Mrs. P. J.....Ypsilanti
Williams, Mrs. Howard..Ann Arbor
Williamson, Mrs. Frederick.....
Ypsilanti
Wilson, Mrs. James.....Ann Arbor
Woods, Mrs. J. J.....Ypsilanti
Wylie, Mrs. W. C.....Dexter
Zerbi, Mrs. Victor.....Ypsilanti

WAYNE COUNTY

Adams, Mrs. Jas. R.....Dearborn
Akroyd, Mrs. C. A.....Detroit
Aldrich, Mrs. C. G.....Detroit
Alexander, Mrs. E. J.....Dearborn
Alles, Mrs. Russell W.....Detroit
Amos, Mrs. T. Grover.....Detroit
Anderson, Mrs. Bruce.....Pontiac
Andries, Mrs. George H.....Detroit
Appleman, Mrs. H. B.....Detroit
Arehart, Mrs. Burke W.....
Grosse Pointe
Ashe, Mrs. Stilson R.....Dearborn
Ashley, Mrs. L. Byron.....Detroit
Athay, Mrs. Roland M.....Eloise
August, Mrs. H. E.....
Huntington Woods
Axelson, Mrs. A. U.....Detroit
Babcock, Mrs. Lloyd K.....Detroit
Babcock, Mrs. W. W.....Detroit
Bagley, Mrs. Harry E.....Dearborn
Bailey, Mrs. C. C.....Detroit
Bailey, Mrs. William A...Dearborn
Barone, Mrs. Chas. J.....
Highland Park

Barone, Mrs. Jerry.....Detroit
Barrett, Mrs. Wyman D.....
Grosse Pointe
Bartemeier, Mrs. Leo.....
Grosse Pte. Farms
Baumgarten, Mrs. E. C.....
Grosse Pointe
Beach, Mrs. Watson.....
Grosse Pte. Farms
Beam, Mrs. A. Duane.....
Grosse Pointe
Beamer, Mrs. George.....Dearborn
Bell, Mrs. I. Kenner.....
Highland Park
Bentley, Mrs. Neil.....Detroit
Berlien, Mrs. Ivan C.....Detroit
Best, Mrs. Edward....Grosse Pointe
Bethea, Mrs. Hardee.....Detroit
Bicknell, Mrs. E. A.....Detroit
Bird, Mrs. H. Waldo..Grosse Pointe
Blain, Mrs. Alexander.....
Grosse Pointe
Bolstad, Mrs. D. S.....Dearborn
Bookmyer, Mrs. Ralph H...Detroit
Bracken, Mrs. Andrew H.....
Dearborn
Brines, Mrs. Osborne A.....Detroit
Bringard, Mrs. Elmer.....Detroit
Bristol, Mrs. William R.....Detroit
Brooks, Mrs. Clark D.....Detroit
Brough, Mrs. G. A.....Grosse Ile.
Brown, Mrs. Audrey O.....
Pleasant Ridge
Brown, Mrs. Gordon T.....Detroit
Budd, Mrs. Alexander.....
Birmingham
Buerki, Mrs. R. C.....Grosse Pte.
Buesser, Mrs. Frederick G...Detroit
Burgess, Mrs. C. M.....
Pleasant Ridge
Burke, Mrs. Ralph M...Grosse Pte.
Burnham, Mrs. D. C.....Detroit
Callery, Mrs. Albert L.....Detroit
Calkins, Mrs. H. Neill.....Detroit
Callaghan, Mrs. Thomas T.....
Detroit
Campbell, Mrs. Mac D.....
Pleasant Ridge
Candler, Mrs. C. L.....Grosse Pte.
Carpenter, Mrs. Claire H...Detroit
Carrick, Mrs. Lee.....Detroit
Carter, Mrs. John M.....Detroit
Carter, Mrs. Leland F.....
Grosse Pointe
Cavell, Mrs. R. W.....Dearborn
Chall, Mrs. Henry G.....Detroit
Chance, Mrs. Jos. H.....Detroit
Chapin, Mrs. Sidney E.....Detroit
Chipman, Mrs. Willard A...Detroit
Christensen, Mrs. C. A...Dearborn
Christopher, Mrs. Jas. G.....Detroit
Clark, Mrs. Harold E.....
Huntington Woods
Clarke, Mrs. Robt. B.....
Grosse Pointe
Clifford, Mrs. T. P.....Detroit
Clinton, Mrs. Wm. R.....Detroit
Cole, Mrs. Jas. E.....Detroit
Condon, Mrs. S E.....Grosse Pointe
Connelly, Mrs. Paul J.....Detroit
Connelly, Mrs. Richard C.....
Grosse Pointe
Connolly, Mrs. F. O.....Detroit
Connors, Mrs. J. J.....Detroit
Cook, Mrs. James C.....Dearborn
Cooksey, Mrs. Warren B.....Detroit
Cooper, Mrs. Benj. F.....
Grosse Pointe
Cooper, Mrs. E. L.....Detroit
Corbett, Mrs. John J.....
Grosse Pointe
Costello, Mrs. Russell T.....Pontiac
Cotruro, Mrs. Louis D.....Detroit
Crook, Mrs. C. L...Highland Park
Croushore, Mrs. J. E.....Detroit
Cusick, Mrs. Paul.....Detroit
Darling, Mrs. Charles E.....Detroit
Darling, Mrs. Milton A.....Detroit
Davidson, Mrs. Harry O.....
Pleasant Ridge
Dawson, Mrs. W. A.....Inkster
Dempster, Mrs. Jas. H.....Detroit
DeNike, Mrs. A. James.....Detroit
Dennis, Mrs. M. S.....Dearborn
DeSpelder, Mrs. R. E.....
Grosse Pointe
Dittmer, Mrs. E. F.....Detroit
Donald, Mrs. Douglas.....Detroit
Doub, Mrs. Howard P.....Detroit
Downer, Mrs. Ira G.....Detroit
Dubois, Mrs. P. W.....Detroit
Dunlap, Mrs. Henry..Grosse Pointe
Dunn, Mrs. Cornelius E.....Detroit
Eisman, Mrs. Clarence H.....
Grosse Pointe
Elvidge, Mrs. R. J.....Detroit
Edmondson, Mrs. R. B. .....Detroit
Ewing, Mrs. C. H.....Grosse Pointe
Fallis, Mrs. L. S.....Detroit
Faunce, Mrs. S. P.....Detroit
Felcyn, Mrs. W. G.....Detroit
Fellers, Mrs. R. L.....Detroit
Fenton, Mrs. R. F.....Birmingham
Fenton, Mrs. Stanley C.....Detroit
Ferris, Mrs. George N.....Detroit
Fisher, Mrs. C. L.....Grosse Pointe
Fisher, Mrs. Geo. S.....Detroit
Fisher, Mrs. James M.....
Grosse Pointe
Fitzgerald, Mrs. J. M.....
Grosse Pointe
Flaherty, Mrs. Norman W.....
Dearborn
Flaherty, Mrs. S. A.....Detroit
Ford, Mrs. G. A.....Detroit
Ford, Mrs. S.....Detroit
Fordell, Mrs. Frank.....Detroit
Foster, Mrs. Wm. L.....Detroit
Freeman, Mrs. Donald K.....
Grosse Pointe
Freeman, Mrs. M. W.....Detroit
Fryfogle, Mrs. J. D.....Detroit
Gardner, Mrs. L. W...Birmingham
Gariepy, Mrs. L. J.....Detroit
Gaston, Mrs. H. B.....Dearborn
Gehring, Mrs. H. W...Birmingham
Geib, Mrs. L. O.....Grosse Pointe
Gellert, Mrs. I. S.....Detroit
Gerondale, Mrs. E. J.....Detroit
Gitlin, Mrs. C.....Detroit
Gittins, Mrs. Perry.....Detroit
Glowacki, Mrs. B. F.....Detroit
Gordon, Mrs. J. W.....Detroit
Gottschalk, Mrs. F. W.....Detroit
Goux, Mrs. R. S.....Detroit
Grace, Mrs. J. M.....Detroit
Granger, Mrs. Geo. R.....Detroit
Gravelle, Mrs. L. J...Grosse Pointe
Greenlee, Mrs. W. T.....Detroit
Grossman, Mrs. S. C.....Detroit
Guerrero, Mrs. Jose.....Detroit
Gurdjian, Mrs. E. S.....Detroit
Hall, Mrs. E. W.....Detroit
H'Amada, Mrs. N. K.....Detroit
Hansen, Mrs. F. E.....Detroit
Harm, Mrs. W. B.....Detroit
Harper, Mrs. J. T.....Detroit
Harris, Mrs. H. H.....Dearborn
Hartman, Mrs. Frank W...Detroit
Hasley, Mrs. C. K.....Detroit
Hastings, Mrs. O. S.....Detroit
Hauser, Mrs. I. J.....Detroit
Hauser, Mrs. J. E.....Detroit
Havers, Mrs. Howard.....
Grosse Pointe
Hawkins, Mrs. J. W.....Detroit
Heldt, Mrs. T. J.....Pleasant Ridge
Henderson, Mrs. L. T.....
Grosse Pointe
Heyner, Mrs. S. A.....Detroit
Hickey, Mrs. J.....Dearborn
Hillenbrand, Mrs. Alfred E.....
Grosse Pointe
Hodges, Mrs. Frank J...Dearborn
Hodges, Mrs. Jason..Grosse Pointe
Hoffman, Mrs. E. S.....Detroit
Hoops, Mrs. Geo. B.....Detroit
Horton, Mrs. R. H.....Detroit
Horvath, Mrs. J. J.....Detroit
Howard, Mrs. A. Z.....Detroit
Howlett, Mrs. H. T.....Detroit
H'romadko, Mrs. Louis.....Detroit
Hull, Mrs. L. W.....Detroit
Huminski, Mrs. T. S.....Detroit
Hummel, Mrs. A. R.....Detroit
Hunt, Mrs. T. H.....Detroit
Husband; Mrs. C. W.....Detroit
Husband, Mrs. R.....Detroit
Iacobell, Mrs. Peter.....Detroit
Igna, Mrs. E. J.....Detroit
Insley, Mrs. S. W.....Detroit
Irwin, Mrs. Wm. A.....Detroit
Jaekel, Mrs. C. N.....Grosse Pointe
Jaffar, Mrs. D. J.....Detroit
Jarvis, Mrs. Harold F.....Detroit
Jeffries, Mrs. Benj.....Detroit
John, Mrs. H. R.....Pleasant Ridge
Johnson, Mrs. Ralph A.....Detroit
Johnson, Mrs. Vernon P.....
Grosse Pointe
Johnson, Mrs. Vincent.....Detroit
Johnston, Mrs. Wm. E.....Detroit
Joinville, Mrs. E. V.....
Windsor, Ontario
Jones, Mrs. R. D.....Detroit
Jordan, Mrs. R. G.....Detroit
Joyce, Mrs. S. J.....Detroit
Jury, Mrs. D.....Pleasant Ridge
Kasper, Mrs. J. A.....Grosse Pointe
Kaump, Mrs. D. H.....Detroit
Keane, Mrs. Wm. E...Grosse Pointe
Kehoe, Mrs. H. J.....Detroit
Keim, Mrs. Harther L.....
Grosse Pointe
Kelley, Mrs. F. J.....Grosse Pointe
Kennary, Mrs. James.....Detroit
Kidner, Mrs. F. C.....Grosse Pointe
Killins, Mrs. Charles.....Detroit
King, Mrs. Edward D.....Detroit
King, Mrs. Melbourne J.....Detroit
Knaggs, Mrs. Chas. W.....
Grosse Pointe
Koebel, Mrs. R. H...Grosse Pointe
Kokowicz, Mrs. R. J.....Detroit
Krynicki, Mrs. F. X.....Detroit
Kulaski, Mrs. Chester H...Detroit
Kullman, Mrs. H. J.....Dearborn
LaBerge, Mrs. J. M.....Wyandotte
LaMarche, Mrs. N. O.....Detroit
Lampman, Mrs. H. H.....
Highland Park
Lang, Mrs. Ernest F.....Detroit
Lange, Mrs. A. H.....Detroit
Lanings, Mrs. Geo. M.....
Highland Park

Ledwidge, Mrs. P. L...Beverly Hills
Leibinger, Mrs. Henry R.....
Grosse Pointe
Lepley, Mrs. F. O.....Grosse Pointe
Leszynski, Mrs. J. S.....Detroit
Liddicoat, Mrs. A. G.....Detroit
Lightbody, Mrs. J. J.....Detroit
Lilly, Mrs. C. J.....Detroit
Lippold, Mrs. Paul H.....Detroit
Lockwood, Mrs. Bruce.....Detroit
Lofstrom, Mrs. J. E.....
Grosse Pointe
Longo, Mrs. Salvatore.....
Grosse Pointe
Longyear, Mrs. H. W.....
Bloomfield Hills
Loranger, Mrs. C. B.....
Grosse Pointe
Loucks, Mrs. R. E.....Farmington
Lovas, Mrs. W. S.....Dearborn
Lutz, Mrs. E. F.....Detroit
MacGregor, Mrs. W. W.....Detroit
Mackersie, Mrs. Wm. G.....Detroit
MacQueen, Mrs. M. D.....Detroit
Maczewski, Mrs. John.....
Grosse Pointe Woods
Malone, Mrs. R. S.....Grosse Pointe
Maloney, Mrs. John A.....
Birmingham
Mancuso, Mrs. Vincent S...Detroit
Marsh, Mrs. A. R.....Dearborn
Martin, Mrs. E. G.....Detroit
Martin, Mrs. Peter A.....Detroit
Martmer, Mrs. E. E...Grosse Pointe
May, Mrs. F. T.....Detroit
Mayer, Mrs. E. V.....Detroit
McAlonan, Mrs. Wm. T.....Detroit
McClellan, Mrs. G. L.....Detroit
McColl, Mrs. Clarke.....Detroit
McCormick, Mrs. Colin C.....
Dearborn
McCormick, Mrs. F. T.....Detroit
McDonald, Mrs. A. L.....
Grosse Pointe
McDonald, Mrs. Allan.....Detroit
McEvitt, Mrs. Wm. G.....Detroit
McGraw, Mrs. A. B...Grosse Pointe
McIntyre, Mrs. William.....
Grosse Pointe
McKinnon, Mrs. J. D.....Detroit
Menagh, Mrs. F. R.....Detroit
Merrill, Mrs. Wm. O.....
Bloomfield Hills
Meyers, Mrs. Dan W.....
Grosse Pointe
Mikay, Mrs. B.....Detroit
Molnar, Mrs. S. K.....Dearborn
Molner, Mrs. J. G.....Detroit
Monson, Mrs. Robt. C.....Detroit
Morley, Mrs. H.....Pleasant Ridge
Moroun, Mrs. Sheffick J...Detroit
Murphy, Mrs. R. T.....
Pleasant Ridge
Murray, Mrs. Wm. A.....Detroit
Nahigian, Mrs. Russell.....Detroit
Norton, Mrs. A. B.....Detroit
Novy, Mrs. R. L.....Detroit
Oetting, Mrs. Chas. H.....Detroit
Ohmart, Mrs. G. B.....Detroit
Olmstead, Wm. R.....Detroit
Olmsted, Mrs. Geo. S.....Detroit
Owen, Mrs. C. I.....Detroit
Parsons, Mrs. J. P.....Grosse Pointe
Perkin, Mrs. F. S.....Grosse Pointe
Pichette, Mrs. J. W.....Dearborn
Pickard, Mrs. O. W.....Detroit
Pietra, Mrs. A. W.....Detroit
Plaggemeyer, Mrs. H. W.....Detroit
Poirier, Mrs. R. A.....Detroit
Porretta, Mrs. F. S.....Detroit
Potter, Mrs. L. S.....Grosse Pointe
Priborsky, Mrs. B. H.....Detroit
Price, Mrs. Hazen.....Detroit
Procailo, Mrs. A. B.....Dearborn
Purcell, Mrs. F. H...Grosse Pointe
Ratigan, Mrs. Carl S.....Dearborn
Rebuck, Mrs. J. W.....Detroit
Reed, Mrs. H. W.....Detroit
Rennell, Mrs. L. P.....Detroit
Reveno, Mrs. Wm. S.....
Highland Park
Reyner, Mrs. C. E.....Detroit
Reynolds, Mrs. R. P.....Detroit
Robb, Mrs. J. M.....Grosse Pointe
Roman, Mrs. S. J.....Detroit
Ross, Mrs. Donald G.....
Grosse Pointe
Runge, Mrs. E. F.....Dearborn
Rupp, Mrs. J. R.....Detroit
Rutzen, Mrs. A. C.....Detroit
Ryerson, Mrs. F. S.....Detroit
Sadler, Mrs. Henry, Jr.....
Grosse Pointe
Sage, Mrs. Thomas....Grosse Pointe
Sapala, Mrs. Andrew.....Detroit
St. Louis, Mrs. R. J...River Rouge
Sawyer, Mrs. H. F...Pleasant Ridge
Scarney, Mrs. H. D.....Pontiac
Schellinger, Mrs. H. K.....Detroit
Schmidt, Mrs. W. F.....Detroit
Schneck, Mrs. R. J.....Detroit
Schulte, Mrs. C. H.....Detroit
Schweigert, Mrs. C. F.....Detroit
Seeley, Mrs. J. B.....Dearborn
Sellers, Mrs. C. W.....Detroit
Sellers, Mrs. Graham.....Detroit
Sewell, Mrs. Geo.....Detroit
Sewell, Mrs. G. W...Highland Park
Sharp, Mrs. E. A.....Grosse Pointe
Sharrer, Mrs. C. H...Grosse Pointe
Sherman, Mrs. Wm. L.....Detroit
Sherrin, Mrs. Edgar.....
Pleasant Ridge
Shreve, Mrs. Alfred J...Dearborn
Sieber, Mrs. E. H.....Dearborn
Siefert, Mrs. Wm. A.....Detroit
Sinclair, Mrs. J. W.....Detroit
Singer, Mrs. F. W.....Detroit
Sippola, Mrs. Geo. W.....Detroit
Slaugenhaupt, Mrs. J. G.....Detroit
Slevin, Mrs. John G., Jr.....
Grosse Pointe
Smith, Mrs. J. A.....Detroit
Somers, Mrs. Donald C.....
Birmingham
Sonda, Mrs. L. P.....Detroit
Spademan, Mrs. L. C.....
Birmingham
Spalding, Mrs. Edward.....
Grosse Pointe
Stapleton, Mrs. Wm. J.....Detroit
Stefani, Mrs. E. L.....Detroit
Steinbach, Mrs. Henry B.....
Grosse Pointe
Stellhorn, Mrs. C. E.....Detroit
Sterling, Mrs. R. R.....
Pleasant Ridge
Stirling, Mrs. Alex M.....
Grosse Pointe
Stockwell, Mrs. B. W.....
Grosse Pointe
Stockwell, Mrs. Glen W.....Detroit
Stokfisz, Mrs. Thaddeus..Dearborn
Stone, Mrs. Dayton.....Detroit
Straith, Mrs. Claire L.....Detroit
Straith, Mrs. Richard.....
Pleasant Ridge
Summers, Mrs. Wm. S.....Detroit
Swanson, Mrs. Robert.....
Grosse Pointe
Swartz, Mrs. F.....Grosse Pointe
Tenerowicz, Mrs. R. G.....Detroit
Texter, Mrs. Elmer C.....Detroit
Thumann, Mrs. R. C.....
Grosse Pointe
Toaz, Mrs. A. B.....Detroit
Townsend, Mrs. F. M.....
Grosse Pointe
Tremain, Mrs. Harold.....Detroit
Turcotte, Mrs. Vincent J.....
Grosse Pointe
Umphrey, Mrs. C. E.....Detroit
Van Rhee, Mrs. Geo.....Detroit
Vossler, Mrs. Albert E.....
Grosse Pointe
Walker, Mrs. R. V.....Detroit
Walls, Mrs. Arch.....Birmingham
Warden, Mrs. H. F.....Dearborn
Warren, Mrs. Wadsworth....Detroit
Watson, Mrs. Douglas J.....Detroit
Watson, Mrs. J. E.....
Bloomfield Hills
Watts, Mrs. John C.....Detroit
Watts, Mrs. Joseph.....Detroit
Weaver, Mrs. C. E.....Detroit
Weaver, Mrs. Delmar F.....
Grosse Pointe
Weed, Mrs. Milton R.....Detroit
Weiser, Mrs. Frank A.....
Grosse Pointe
Wendal, Mrs. J. S.....Detroit
Weston, Mrs. E. E.....Detroit
Weyher, Mrs. R.....Detroit
White, Mrs. Milo R.....Detroit
Whiteley, Mrs. Robt. K.....
Grosse Pointe
Whitney, Mrs. E. L.....Detroit
Whittaker, Mrs. A. H.....
Grosse Pointe
Wiant, Mrs. John L.....Detroit
Wietersen, Mrs. F. K...Birmingham
Williams, Mrs. C. J...Grosse Pointe
Wilson, Mrs. Gerald D.....Detroit
Witter, Mrs. J. A.....Detroit
Witwer, Mrs. E. R.....Detroit
Wood, Mrs. K. A.....Detroit
Yott, Mrs. Wm. J.....Detroit
Young, Mrs. Lloyd B.....Detroit
Zabinski, Mrs. Edward.....
Grosse Pointe

Honorary Member

Kiefer, Mrs. Guy L.....East Lansing

Associate Members

Ferris, Mrs. G. N.....Detroit
Hamilton, Mrs. Q. P.....Detroit
Kelly, Mrs. L. J.....Detroit
Trafus, Mrs. P. C.....Detroit

WAYNE COUNTY—SOUTHERN BRANCH

Ashe, Mrs. R.....Allen Park
Bott, Mrs. E. T.....Wyandotte
Bower, Mrs. Donald..Lincoln Park
Boyd, Mrs. John.....Trenton
Brown, Mrs. Charles....Wyandotte
Brown, Mrs. Robert.....Dearborn
Bruer, Mrs. Edgar.....Allen Park
Cahalan, Mrs. Joseph....Wyandotte
Cameron, Mrs. Arthur H.....
Wyandotte
Coan, Mrs. Glenn L.....Grosse Ile
Cook, Mrs. James.....Wyandotte
Davis, Mrs. E. F.....Wyandotte
Deering, Mrs. Robert J...Grosse Ile
Easterly, Mrs. Robert....Wyandotte
Engel, Mrs. Earl.....Wyandotte
Erickson, Mrs. Eldon W.....
Grosse Ile
Foote, Mrs. James.....Lincoln Park
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Wyandotte
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SPECIAL SCREENING BOARD EXAMINATION FOR DOCTORS ON STUDENT EXCHANGE OR LIMITED VISITOR'S VISAS

January 19 and 26, 1954

Those foreign doctors who are in this country on a Student Exchange or Limited Visitor's Visa and wish to train only in a Michigan hospital and then return to their own country may now appear before the Screening Board to qualify for temporary licensure without first obtaining a Michigan Basic Science Certificate. If they successfully pass the Screening Board, they will be eligible for temporary licensure for residency training or postgraduate work in an approved training hospital in Michigan renewable annually up to five years. HOWEVER, prior to issuance of the temporary license, they must have complied with the internship requirement of a one-year rotating, twenty-four months mixed or straight; or, two years of a residency will be accepted in lieu of either. Any of these must have been served in an approved training hospital in the UNITED STATES OR CANADA.

A personal interview in the Board office, completion of the required forms and satisfactory proof of the type of visa are required by the Board prior to issuance of the Referral Slip to the Screening Board.

Apply at Michigan State Board of Registration in Medicine, 202 Hollister Building, Lansing 8, Michigan.

J. Earl McIntyre, M.D., *Executive Secretary*

THIS PROCEDURE DOES NOT APPLY TO THOSE DOCTORS WHO HAVE APPLIED OR INTEND TO APPLY FOR UNITED STATES CITIZENSHIP

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